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TECH GUIDE
CHIPS WITH MARMITE!

An unusual way to weather paint realistically

ARMoured CAVALRY

We build Model Victoria's beast of an armoured car, the Centauro

M4 MARVELLOUS

Dragon's new Sherman sets the standard for 1:72



BAGHDAD BATTLE BUS

Tamiya's AAVP7A1 is brought up to date and put into action...

October 2006 / £3.50 / Issue 6
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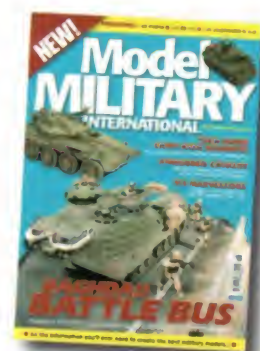


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Diary Dates...

GLASGOW OPEN MODEL SHOW & COMPETITION

Saturday 7th October 2006
Kelvin Hall International
Sports Arena on Argyle Street,
Glasgow.

Saturday 10am - 4pm

This show is the biggest in Scotland after the Scottish National Scale Model Show at Perth and it will be the fourth year at the present venue, next to the renowned Glasgow Transport Museum (admission to the museum is free, lots of 1:1 scale!) Visitors to the show can also visit the newly reopened Kelvingrove Art Gallery and Museum over the road (also free admission), which now has a 602 Squadron Spitfire (a real one) suspended from the roof in the main lobby.

Admission: £2.50 for adults, 50 pence for children and pensioners. Family tickets are £5 for two adults and two children.

There will be a 42-class competition, open to all, twenty traders and twenty clubs and SIG displays, including MAFVA Scotland. There will be a trophy for the best visiting club or SIG display. Catering will be available at the show as well as the Museum cafeteria being open all day.

Contact: Geoff Crow at geoff.crow@btinternet.com

MAFVA LONDON BRANCH ANNUAL OPEN COMPETITION AND SHOW

14th October 2006
St. Mary's Church hall,
Edith Road, Kensington.
Between 10.30 and 17.00

Contact: Peter Bailey on 01474 536232

NORTH SURREY MILITARY MODELLING SOCIETY ANNUAL SHOW AND OPEN COMPETITION

21st October 2006
Thomas Wall Centre in Benhill
Avenue Sutton, Surrey.
Doors open at 10:00am
£2.00 entrance fee.

Competition entries are invited from all fields of scale modelling, military and civilian. A full complement of traders will be in attendance, including Lou Stener, S&B Models, Aviation Book Centre, Pol Models, LSA Models, Collectakit and more. Also club stands and the famous refreshment stop!

Contact: David Grummitt
020 8688 9787 or
davidgrummitt942@hotmail.com



M5 IN DETAIL

The latest publication from renowned author David Doyle has just landed on our doormat, and what an excellent reference source for fans of the M5 and M5A1 Stuart Light Tank this is.

The book is a photographic study in a handy landscape format, which I think is ideal for laying flat on the workbench whilst working on your latest project. The book consists of 40 pages packed with large black and white and colour photos of both restored and war time vehicles, both inside and out. These together with original Ordnance Department drawings really make this the perfect reference for anyone interested in this cool little tank.

ISBN 0-9786084-0-2 for further info go to www.stevenshobby.com



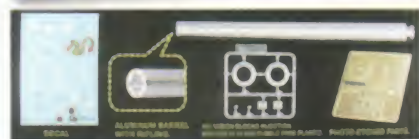
LEGENDS LATEST RELEASES

Legends are continuing to produce some appealing conversions and figure sets. We think these three new releases will prove very popular, firstly we have a set of 12 German heads, with a variety of headgear and some great expressions to boot.

LF0113 - German Heads set #2 (WWII)

For modern armour fans we have two Patton based conversions. The first is to back date the M60A1 back to the original M60, which featured the M48 style turret. The second conversion is to turn the Tamiya M48A3 into an Israeli Megach 3 as used during the 1973 Yom Kippur War.

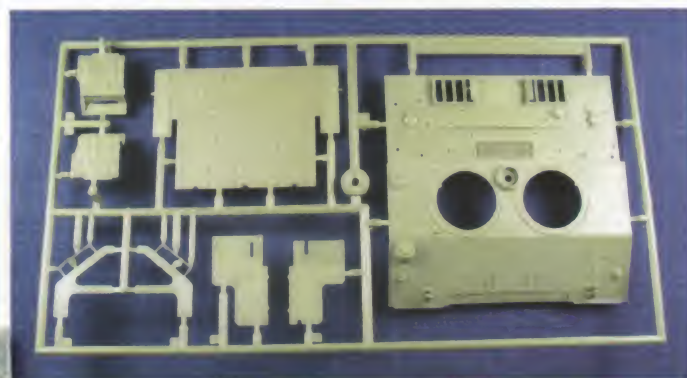
LF1130 - M60 conversion for Tamiya M60A1/A3
LF1131 - IDF Megach 3 conversion for Tamiya M48A3



THE BIG SHOT

As we go to press the first test shots of AFV Clubs awesome M40 GMC have been released. The kit looks superb, featuring a turned aluminium barrel complete with rifling.

A set of highly detailed rubber band style tracks are included, as well as clear plastic cupolas are just some of the highlights. From what we have seen this looks to be another winner from the team at AFV Club.

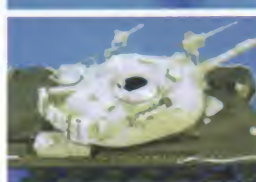


OUR SURVEY SAID...

Model Clubs' views sought by BTHA survey.

The British Toy And Hobby Association (BTHA) are conducting a survey amongst UK model clubs over the coming two months. The focus of the survey is to look at how clubs around the U.K. are engaging young people in their activities. Questionnaires will be mailed out to IPMS-affiliated and some non-affiliated clubs by the end of August. Your club could benefit from participation. All completed and returned questionnaires will be entered into a prize draw - the lucky winning club receiving £250 worth of modelling materials with two runners up receiving £100 worth. Cut off date for returned survey forms is October 16th.

If you run a non-IPMS affiliated club and want to take part, please contact Mark Peacock, who has assisted the BTHA with the survey, on 01234 273434 or thespacefactory@btconnect.com





Keith Goldsworthy

IC A FIREFLY

We take a look at Tamiya's 3rd version of the Sherman in the rapidly expanding 1:48 range.

The Sherman Firefly is the third variant produced by Tamiya in their ever-expanding 1:48 scale series of vehicles.

As would be expected the kit shares the majority of parts with the early production M4 kit with additional sprues containing parts relevant to the Firefly. Also contained within the box is the die-cast lower hull, although adding weight to the finished model I still am unconvinced of this approach by Tamiya. The lower hull lacks a certain amount of detail, most noticeable the lack of bolt detail on the idler wheel mounts.

The transmission housing lacks casting texture although it is not that noticeable in this smaller scale. Another problem with the housing is that it does not create a perfect fit with the lower metal hull (the latter is designed to mate with the 3 piece housing of the M4 kit). Whilst the outer drive covers

will hide most of the resultant gap some further work is required by the modeller.

Suspension bogies are made from 3 pieces but like the larger 1:35 cousin's lacks bolt head and bolt hole detail. Road wheel are of the open 5-spoked variety. Although photographs show this type, in use on the Sherman IC, the solid road wheels seem to be more common. Link and length T48 track are provided as with the other Sherman kits. I would have preferred to have seen the more common T54E1 steel chevron tracks supplied (something the after-market companies may consider?).

The upper hull is one piece but the weld seams are again sunken. The only benefit of this approach by Tamiya is to provide the modeller with locations for their own raised seams. Most of the tank tools are moulded in place, although not everyone's cup of tea, the moulded tools on

the Cromwell appeared OK once painted. The starting handle is provided as a separate piece and as no rear stowage bin is provided the handle can be fixed to the rear hull plate (the instructions do not appear to show where to place this item).

The various pieces of appliqué armour are provided but lack the roughed-up edges so often seen, caused by the gas torch used to cut them.

The distinctive Firefly turret has been particularly well done with separate crew hatches, pistol port, appliqué armour, gun and rotor shield. The armoured radio box that further defines a Firefly turret has three circular plates on its top. These are probably not as common as the square plates seen on many wartime photographs but are still seen in several well known photos.

Decals are provided for four different vehicles allowing the modeller to depict a Firefly from Normandy through to Germany.

I am convinced this kit will build straight from the box into a fine example of a Firefly. However, given the wealth of reference material available in printed form and via the internet, I am sure Sherman fans will want to add in the missing detail such as raised weld seams, hatch retaining springs, engine deck grab handles, periscope guards, turret tie-downs, etc.

This is another welcome example of 'British' armour from Tamiya in this increasingly popular scale. Perhaps a Churchill will be forthcoming? ■



Here we can see the join between the metal lower hull and the transmission housing is less than perfect and will require some extra work before construction can continue.





ARMoured CAVALRY

The Editor builds the impressive modern Italian armoured car, "Centauro".



Keeping with tradition, the Italian Army has always had a soft spot for armoured cars and with the introduction of the Centauro B1 "long version" have produced the ultimate. Armed with a 105mm main gun and no less than three 7.62mm machine guns, together with a top speed of 105 km/h (m.p.h.) makes this a formidable weapon for the Italian Army.

IN THE BOX

The Model Victoria kit consists of a full resin kit complete with an etched brass fret, brass rod and copper wire. A nice set of waterside decals for 8 vehicles including vehicles deployed on KFOR, SFOR duties in the Balkans as well as Operation Iraqi freedom. The level of casting throughout is excellent, the light grey resin really lets the detail stand out. It quickly becomes apparent how good the master for this kit must have been and how much care went into producing it.

CONSTRUCTION

Construction starts with the suspension and drive train, careful attention will have to be paid to the instructions. This section is the most involved of the whole kit, and certainly the most time consuming. As with resin or multi media kits of this nature I always strengthen the cyano joints with a small amount of 5-minute epoxy glue for extra strength. This glue can end up

leaving small blobs around the joint; these can be easily disguised during the weathering process.

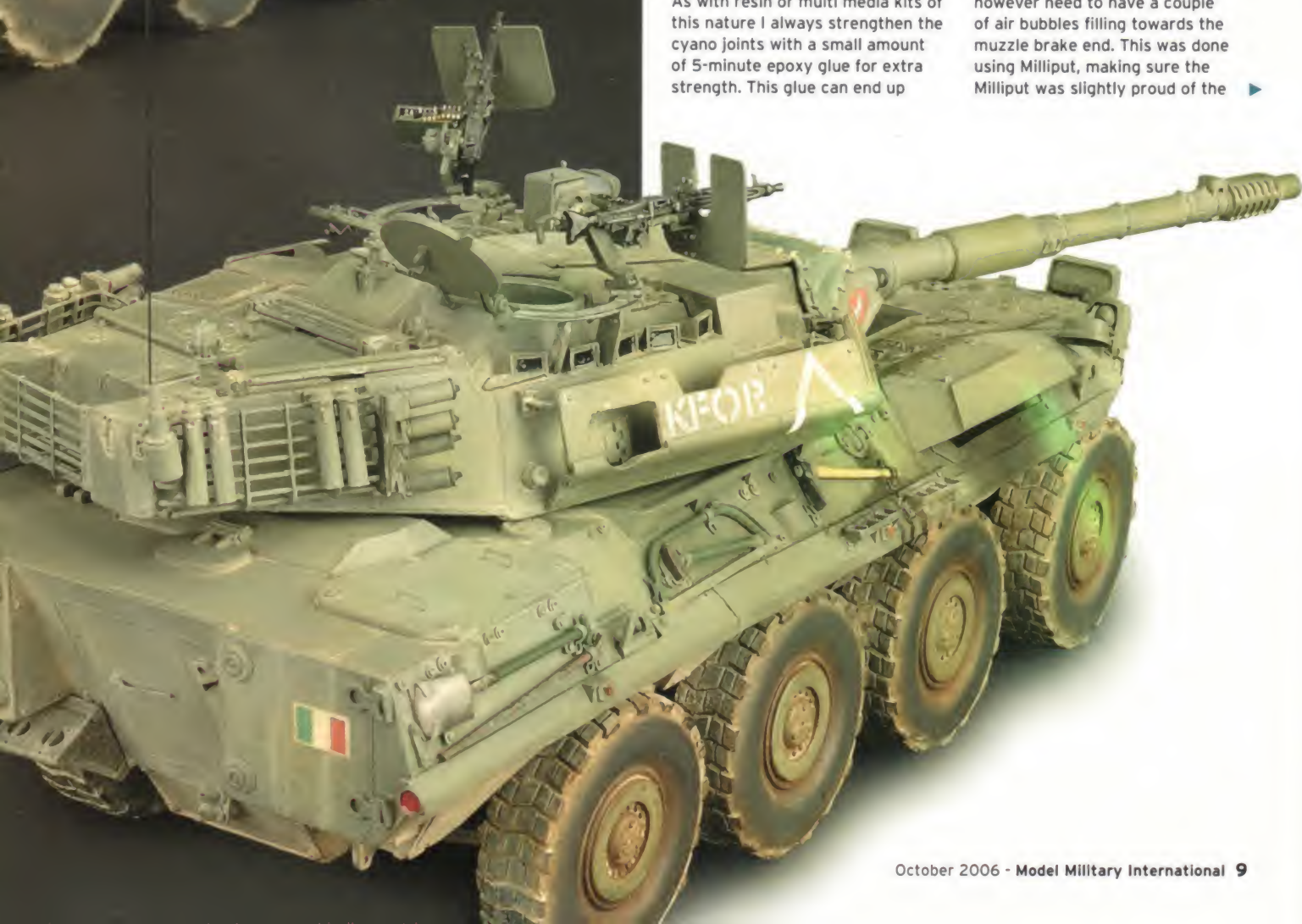
I think this minor inconvenience is worth the extra strength this glue offers.

With the suspension complete, it was time to fix the upper and lower halves together making sure that the two small plugs that fill holes in the front and rear of the lower hull are glued in place before the halves go together. In my haste I missed them out and made myself a fair amount of extra work in the process.

On the front of the upper hull are a series of small access panels that require small brass fittings to be attached to each. The parts are obviously included within the fret but no mention is made of them in the instructions. This also goes for the gun travel lock; unfortunately there isn't a detailed shot of this assembly in the instructions. Some mention of the short lengths of wire required would have been nice; I ended up putting the upper and lower clamps around the barrel and measured the resultant gap then cut the brass rod to suit.

THE TURRET

The turret like the rest of the model needed only minimal clean up, the gun barrel did however need to have a couple of air bubbles filling towards the muzzle brake end. This was done using Milliput, making sure the Milliput was slightly proud of the

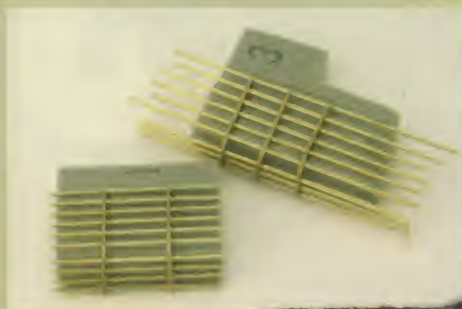




The handles for the front hull hatches are supplied on the brass fret, the author chose to replace them with brass rods, for a more three dimensional look.



This is a big lump of resin, the Centauro long version is exactly the same length as an M1 Abrams tank and only a fraction narrower.



Royal Models provide a set of resin formers to aid the assembly of the turret stowage baskets.



The two side baskets did require some test fitting before final fitment. But once in place looked superb.



The rear basket needed some very exact trimming for an exact fit, as you can see I need to practice a bit more when it comes to delicate filing.



In this photo the author is adding a pin wash around selected raised details on the turret roof, a slightly thicker wash is used here.



Here we can see the first colour wash is being applied to the hull, note the colour of the wash has been kept subtle.



The Archer dry-rubs first received a barrier coat of Johnson's Klear before the wash was applied over them, this prevents them lifting.

surrounding surface. Once it had set it was sanded flush.

To make the rear turret baskets Model Victoria supply brass rod, and copper and etched brass stanchions together with small forming tools. I chose to replace both the copper and brass supplied in the kit because the wire supplied had been coiled up to fit in the box, I thought it would be easier to use stuff that wouldn't need straightening first.

Be warned these baskets were very fiddly to assemble, I tackled them one at a time once the structure was ready to receive glue. I found it best to use slow setting cyano on every joint between the rod and etched stanchions, once I had dotted all the joints with a small amount of glue and checked it was all still straight, I gave it a quick blast of activator to fix it all solidly in place. The excess brass rod was then shaped to the formers and the excess trimmed to length before fitting.

The turret assembly includes a set of applique armour plates for the turret roof, for some reason I ended up having a couple of the smaller panels left over and could not for the life of me work out where they were supposed to go.

The instructions weren't one hundred percent clear when it came to how the machine guns and their skate rings were attached. There isn't a clear photo showing exactly how these parts are positioned. Some trial and error dry fitting was needed before I worked out exactly how they went together.

PAINING

After an initial coat of automotive grey primer it became apparent that the turret had some tiny imperfections that needed to be cleaned up before I could continue. The rest of the model was buffed

using a round-headed nylon brush in my mini drill.

With the model prepared to my satisfaction I was ready to paint it green!

After much pondering over the few photos I had of the Centauro I decided on Vallejo Modelair 012 Dark Green followed by Model Color 924 Russian Uniform Green.

With the base colour on the hull and turret received a couple of coats of Johnson's Klear in preparation for the decals. The decals supplied in the kit are very good; they adhered well to the gloss coat and snuggled down with the aid of micro set and sol decal setting solution.

Once the decals were all in place I gave the model a further coat of Johnson's, this does two things firstly it creates a protective coat for the delicate decals, and secondly it helps to hide any edge that is sometimes visible around the edge of the decals. With this complete Vallejo matt varnish was misted over the model prior to all detail painting.

The detail painting did take a while to complete, as there are all the light and reflectors to deal with. To paint these I first painted them with Games workshops Mithril silver using a fine brush, followed by either Tamiya clear red and orange as appropriate. One thing I have found when brush-painting with these clear Tamiya paints, is that the working time is very short and the paint becomes very thick and sticky, so an ample supply of water to keep the brush from clogging up is essential.

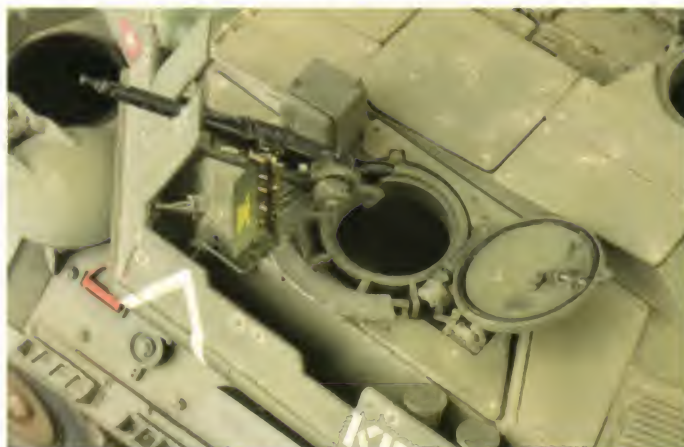
As this is a very modern vehicle I had in mind that as the tools would probably come from the manufacturers in subdued military colours, i.e. green in this case. My thinking that many tools today aren't made traditional wood for handles, instead being made from composite plastics.

WHEEL PAINTING

The weathered dusty effect on the wheels was a complete accident; originally the effect I wanted to



The Prancing horse and shield marking on the mantlet means this vehicle is from one of the most famous regiments of the Italian cavalry, the 3rd Saboya Caballeria.



The MG 42/59 machine gun was detailed with some pre-painted etched brass from Eduard, the ammo box markings came from some left over in a Tamiya M113A3 kit. Graphite powder weathered the skate ring.



The Kit decals went on very easily after dipping them in Johnson's Klear before placing them on the model. The scratches were done by dragging a cocktail stick over the freshly applied airbrushed dust.



"I topped the Centauro off with a pair of Accurate Armour's new carbon fibre aerials"





achieve was going to be done all with an airbrush.

After I had sprayed the tyres in Vallejo black/grey, following this I then sprayed on a dusty colour, concentrating around the inside edge of the tyre wall.

The more I looked at this effect the more unhappy I became with it; so to rescue it I decided to dry-brush the tyres using Humbrol enamel 67 panzer grey. This was an improvement, but I still wasn't completely happy. So once the

dry-brushing had been given time to dry fully I gave all the wheels a colour wash with oils mixed to a dusty colour to match the airbrushed acrylic colour.

It was at this point something went wrong, in that the wash wouldn't dry fully and actually made the paint sticky, at a loss as to how to fix this problem, I started applying heavy amounts of Mig productions pigments in an attempt to dry up the sticky paint, finally after several applications and half a

tub of pigment later the stickiness seemed to go, and finally to play it safe the black of the tyre side wall was reintroduced by using pastel chalked rubbed on with my finger. It just goes to prove even when using tried and tested techniques things can still go wrong, but this time I was lucky and managed to save it by pure luck.

CONCLUSION

Apart from a few grey areas regarding the location of some

of the smaller parts because the instructions were not 100% clear I really enjoyed this kit, the fit of the parts were good and I liked the fact that Model Victoria supplied duplicates of many of the smaller and more delicate parts, just in case any are broken whilst being removed from their casting blocks. I just wish all of the resin kits I get to build were of this quality. ●



Modelspec

1:35 MODEL VICTORIA ITALIAN A.F.V. B1 CENTAURO
"LONG VERSION" KIT No.0002

Paints used

Vallejo
Dark Green 012, Russian Uniform Green 924
Black Grey 862, Gunship Green 895
German Camouflage Dark Green 979, Red 947
Games Workshop
Chainmail 61-56
Tamiya
Clear Red X-27, Clear Orange X-26

References

Assault, Journal of Armoured and Heliborne Warfare No. 1

- ✓ Very good casting, great subject
- ✗ Instructions could have been clearer

Available from

Available in the UK from SB Models.
www.sbmodels.net

Rating ●●●●●●●●●●



HEAVEN 17

Pete Usher takes a look at the latest 251 from Dragon and explains what happens when things go wrong...

When the editor gave me Dragons new 251 to build I can remember uttering those fateful last words, 'That won't take me long!' But due to some modelling disasters that occurred, I ended up with this diorama.

THE KIT

Even though this kit is small the box is still crammed with goodies - the usual grey plastic sprues hold large numbers of crisp highly detailed parts. There's a bag of individual track links, road pads and a turned aluminium barrel for the 20mm cannon, a fine photo

etched fret which includes a gun shield - this raps around the main gun like a little turret giving protection from small arms fire whilst in operation. But while this flat photo etched option is great, there is also a preformed photo etched gun shield in the box, even better!

251 CONSTRUCTION

As with all vehicles that have an exposed interior, construction and painting of these areas need to be tackled first. The main focus of detail is in the drivers compartment. Dragon have included some very fine decals for the dashboard dials which I applied

straight over the top of the raised dials. I started the interior painting by using Tamiya desert yellow XF 59 mixed with a little Tamiya flat white XF 2 thinned with Tamiya thinners. Once dry I picked out some small details like the 20mm magazines stowed in racks with a 3/0 brush using Humbrol tank grey No. 67. When they were dry I carefully painted the top round of ammo using Humbrol brass No 54 on a 5/0 brush, to not waste precious modelling time while I was waiting for some of the paints to dry I built up the wheels and front axle and placed them into a shoe box where I was keeping the kit. The problem I now had

was that the shoe box had a small hole in which I hadn't noticed originally - the hole was not the main problem more so the front axle that had slipped through it and more than likely ended up in the vacuum cleaner. That was when the diorama of this 251 in long grass with its nose in a hedgerow was born. The rest of the kit went together well as with most of the new Dragon kits, with my only problem being fitting the stowage bins located above the tracks (I found a large panel gap which I filled with Milliput superfine putty. I find this a great filler, with it being water based it can be pushed into a gap and smoothed over with a wet

craft knife without fear of eating into the plastic as with solvent based fillers.

20MM CANNON

The 20mm cannon is a kit in its own right and with stunning detail throughout there are options to have the waiting magazine holder full or empty and the gun breach open or closed. I went for open to show a possible jam. The turned aluminium barrel can be angled at 45° a superb scale replica of the original.

MASKING

The main kit is now ready to be undercoated with Halfords plastic primer, but before I can attempt this I need to fill the gap in the top of the vehicle to protect the interior. First I gently stuff toilet tissue into the compartment to help stop any over spray getting in, then lay decorators masking tape over the top of the tissue, level with the top of the opening, and follow the same procedure for the opening at the rear.

PAINTING

The idea for the paint scheme on this 251 came from a somewhat unorthodox source. I knew I wanted to do a hard edge three-tone colour scheme but didn't have

any set pattern in mind until my son and I actually disabled one in combat. No I'm not a WW2 veteran but I do own a copy of 'Brothers In Arms 2' (earned in blood) for the X Box. The vehicle in the game had a tiger stripe light and dark green pattern on a yellow background, so I more or less copied that for no other reason than I liked it. As I do with all my models I like to pre-shade prior to the main colour application and for this I used Tamiya German grey XF 54 sprayed into all the panel lines and creases. I also like to spray the tracks and running gear with Tamiya dark earth to ensure no white primer is showing, then the same yellow mix was applied as with the interior. I then left this to dry for 24 hours before applying the camouflage colours.

HARD EDGE GREEN

There have been a few methods mentioned recently in various modeling articles for reproducing a hard edge paint scheme mainly using masking tape and airbrushing. But I have always had good results with a quality brush. I use Humbrol No 86 for the dark green mixed very well and only thinned maybe 5% with Humbrol enamel thinners. First I paint the green in a downward direction then ▶



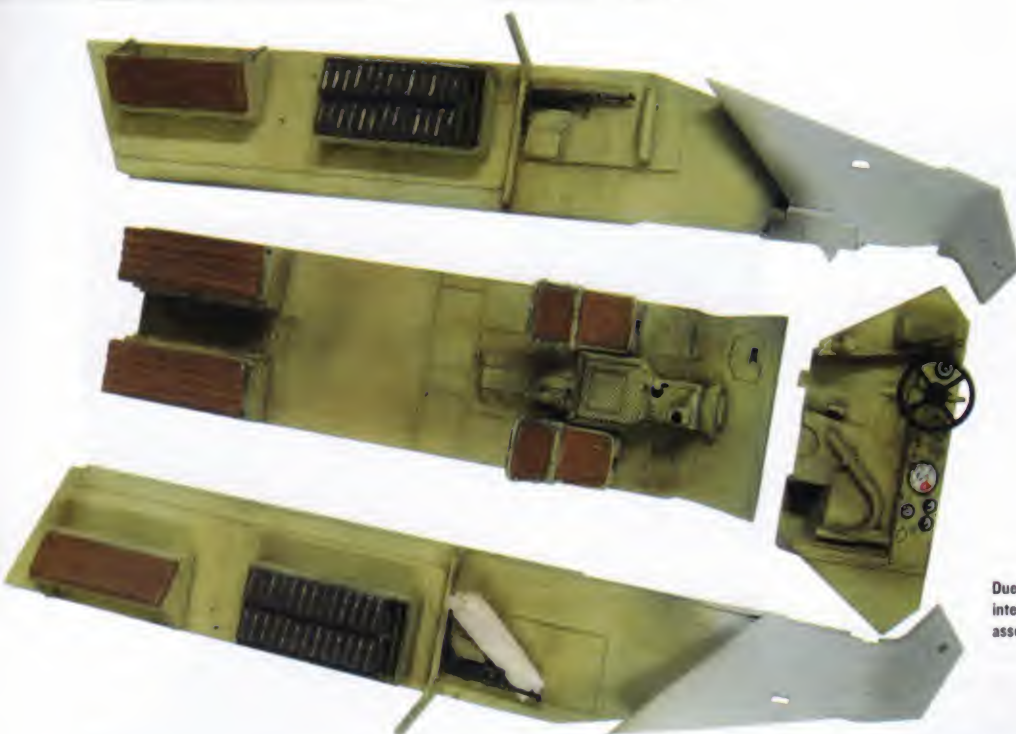
Around the back of the diorama is where the action is all taking place, the Dragon Georgian Legion surrendering figure set (6277) suit this scene perfectly.



The camouflage scheme was inspired by a game the author was playing with his son on an X Box. The camouflage pattern works perfectly in this setting.



The spare magazines included in the Dragon kit combined with the excellent Mission Models turned brass spent cases, really add to the realistic cluttered look.



Small arms battle damage has been added to the stowage lockers by thinning the rear of the parts, then piercing the front side with the tip of a hobby knife.

Due to the way Dragon have designed the parts, the interior can be fully painted and weathered before assembly, which makes the task much easier.



The model now ready for priming and painting. Note the gap between the locker and bonnet side plate above the sprocket.



The running gear has now been thoroughly muddied and all the panel lines have been pre-shaded prior to the camouflage colour being applied.



The base sand has been airbrushed on and the camouflage pattern has been brush painted, as described in the main text.



Another atmospheric shot from the author, taken outside with natural lighting. The Nemrod figures are some of the best figures available in 1:35.



◀ pull the paint in from the sides at a 90 degree angle to flatten any paint that accumulated near the edge of the painted panel, this eliminates the thick edge that can appear on brush painted models. For the light green I mixed a little Humbrol desert yellow 67 with the No. 86 and repeated the same process. To tone down the two greens and help gain some continuity between the colours I over sprayed them with some of the original dark yellow.

WEATHERING

The weathering was kept quite simple, as I didn't want this vehicle to look too beat-up. Firstly I gave the entire kit a good coat of Tamiya clear to seal the main paint scheme. This was followed by some streaky

washes with burnt umber oil paints, (all in a downwards direction) once this was dry the matt varnish was applied. Some worn and chipped paint was then added mainly around the stowage bins and rear door using Humbrol tank grey No. 67 on a 5/0 brush, finally light and dark brown crushed pastel chalks were worked into shaded areas and isolated patches. Now to give the interior a bit of life. I wanted the fighting compartment of this vehicle to show the absolute chaos that proceeded the surrender of the German troops. Dragon supply you with 8 loose magazines, the problem I had was they are all full showing a bullet clearly in the top so I just faced them into blind corners to hide the problem and make them look empty. Some thin brass wire was cut off at similar lengths to recreate empty rounds from the MG-42 and small arms. A ▶



This compact little scene has plenty of action going on. The realistic hedgerow and undergrowth are described in the accompanying tech guide.



Tech Guide - HEDGEROW



To recreate the hedgerows all you need is some lichen, which has been used for railway models bushes for years and is available in most model shops, some 3M Photo Mount spray glue, available in art shops, and finally some dry mixed herbs which you can get in your local supermarket.

Step 1

Superglue the lichen to the pre painted groundwork in a random fashion.

Step 2

Spray the bushes with the photo mount glue (mask off any areas you don't want to get glue or paint on, I've used tin foil).

Step 3

Sprinkle on the herbs.

Step 4

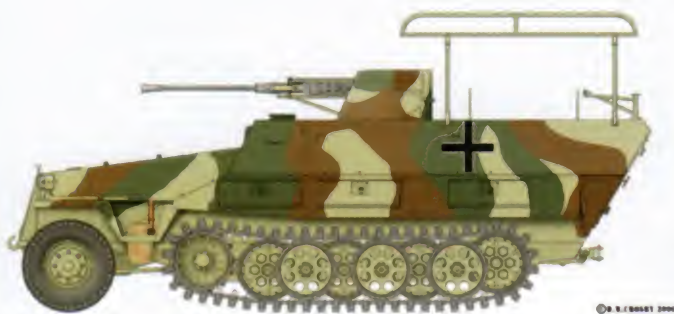
Spray some more glue over the herbs from approx 30cm/1 foot. If you're too close it can blow the herbs off the bush before the glue can stick to them.

Step 5

Spray with Tamiya deep green /olive drab/ yellow green.

Step 6

To give that overgrown feel to the hedgerow randomly stick dried weed and plant roots (I find those little clumps of grass that pop up between paving slabs ideal) from the garden into the hedge and there you have it.



Sd.Kfz 251/17 Ausf.D, from an unidentified unit fighting near the river Elbe in 1945.



Sd.Kfz 251/17 Ausf.D seen during the Ardennes offensive, wearing a rough winter whitewash and sporting four digit number.

packet's worth of Mission Models stunning empty 20mm cartridge cases was finally sprinkled over the fighting compartment floor together with a selection of accessories from the spares box to help replicate the cluttered look I was after.

FIGURES

The figures were a mix of plastic and resin, the plastic figures are Dragons Georgian legion Normandy 1944 No 6277 in classic surrendering poses. I fitted them with hornet mature/ elderly heads I chose these superbly sculpted heads to show the low manpower issues the German army had towards the end of the war. I painted the uniforms using Tamiya tank grey and highlighted them using Mig Productions European dust to give them a faded and dusty look. The attacking

paratroopers are from Nemrod (kit No N35044 Pathfinder officer, N35041 Pathfinder) the quality of the Dragon figures is good, but the resin figures are out of this world, easily the best I've ever seen in 1:35 scale. US Paratroopers uniforms were more brown / buff, than green, so I gave them a base coat of Humbrol dark earth and dry brushed them very softly mixing the original colour slowly adding more and more Humbrol pale stone No121 each successive pass.

DIORAMA

The diorama started with some 15mm laminated MDF board cut to size. Adding a small bolsor lip around the edge to contain the wild grass field. Humbrol dark earth was painted straight onto the MDF to hide the wood grain affect When I was happy with the position of the 251 I marked out the track

marks the vehicle had left with a pen. PVA glue was mixed with some Tamiya flat base so to try and kill the shine of the dry glue I started adding the upright grass made from a masonry brush cut off at roughly 15mm lengths starting in the corner against the bolsor edging, working in small areas of approx 50mm by 50mm were thinly brushed with glue and the small pinched bunches of grass were added. Yes, it is a bit tedious but it's surprising how quickly the grass starts to cover the base. The grass was glued flat where the vehicle had been and the crew had dismantled.

CONCLUSION

The 251 is a great little kit and works well as a centre piece of any diorama. ■

Modelspec

Dragon SD.Kfz.251/17Ausf.D w/2cm Schwebeiafette
Kit No.6292

Materials used

Dragon Georgian Legion figure set 6277
Nemrod US Paratroop pathfinders, N35041, N35044

Paints used

TAMIYA
DESERT YELLOW XF59, NATO GREEN XF57
NATO BROWN XF 68, DARK EARTH XF52
BUFF XF 57, CLEAR X22, DARK GREEN XF 61
FLAT WHITE XF 2
HUMBROL
DARK EARTH 29, TANK GREY 67
BRASS 54, PALE STONE 121
OILS
BLACK, BURNT UMBER
MIG PRODUCTIONS
EUROPEAN DUST PD 208

- ☒ Amazing detail and value for money
- ☒ Fit of the stowage locker parts

Available from
All good model shops

Rating ●●●●●●○○



This low angle shot really adds drama to the scene, note how realistic the long grass looks and the withered old tree looks.



Jim Carswell goes to town with Tamiya's venerable USMC AAVP7A1 UGWS kit

BAGHDAD BATTLE BUS

As long as there have been Marines, there has been a need to get them ashore safely during an amphibious assault. The AAV7A1 RAM/RS (Reliability, Availability, Maintainability/Rebuild to Standard) is one of the latest successors in the line of Marine LVT's (Landing Vehicle, Tracked); later renamed AAV's - Amphibious Assault Vehicles. The updated version of this vehicle differs from the similar LVTP7A1 in several important areas. The use of additional armour in the

form of EAAK (Enhanced Appliqué Armour Kits) was hard on the suspension, so it was upgraded with new suspension parts used in the Bradley series of vehicles. This gave the vehicle several additional inches of suspension ride height. A newer style of track is also used (sometimes called 'Bigfoot' track in the Modelling world). The most obvious identification feature for an upgraded vehicle is if it has the return rollers and road wheels of the Bradley. On the upper hull, a new exhaust muffler replaces the older straight pipe for the exhaust.

A new engine and transmission were among the internal improvements.

During the early phases of Operation Iraqi Freedom, USMC AAV's travelled much farther across land than they were ever designed for, and performed admirably. Although several were lost to enemy action and maintenance problems, they were the only suitable armoured vehicle available for the Marines.

When the popular website 'Missing Lynx' announced an on-line modelling contest for OIF

vehicles last year, I decided to build an AAV7A1 RAMS for an entry. The contest would provide the necessary motivation to finish the project on time!

CONSTRUCTION

Tamiya kit LVTP7A1 # 35159 was used as this comes with the proper turret for the UGWS (Up-gunned Weapons Station) and trim vane that the AAVP7A1 uses. A large transport vehicle such as this with so many hatches begs for an interior to be shown off. Considering how long the

Tech Tip!

Besides the usual stock of styrene sheet, strip, tube and rod, watch out for other useful items such as foil, wire and solder, packaging tubes and the like. It is also worth it to browse through model railway shops as they can carry useful items such as Grant Line and Tichy bolt heads and MV Lenses. Hang on to old kits too; you never know when you might be able to use a certain part.



The interior starts with the basic shapes built up from .030 and .040" sheet styrene and strip for the flooring. The turret basket area is roughed in with a clear plastic tube cut from a container used to package superglue.

basic Tamiya kit has been out, there has never been an after market interior kit made, until fairly recently at least. I decided to scratch-build a basic interior, although the company Hobby Fan had just announced an interior as I was starting this project. I wanted to add the EAAK armour as well, again, Hobby Fan was doing one, but I had long hoarded an old Kirin set, although not 100% accurate, I was determined to use what I could from it. An old Tamiya Bradley kit in the parts box was going to donate some parts, and I got a hold of Friulmodel's new white metal 'Bigfoot' tracks for the Bradley series.

I began by planning the suspension modifications. At first, I thought I would just be able to cut out the sides of the Bradley lower hull and then graft them on to the AAV kit, but then I decided to remove the kit detail and add from there, as there was additional detail missing from both the AAV and the Bradley kit that I wished to add. I cut off all the suspension arm mounts and moulded on shock towers and sanded the area smooth on the AAV kit. The suspension arms were carefully cut out of the Bradley sidepieces to be re-used on the AAV7. A lot of time was spent measuring and eyeballing the proper location of the new suspension before anything was glued. I made a rough set of drawings to make sure everything looked right. Once I figured I had a decent plan of attack for the suspension I moved on to the interior.

INTERIOR

Although I had found a few reference photos on the Internet, I was still lacking quite a few details of the interior. A request

for help on a couple of Websites was answered by a few very helpful individuals, including Mike Mummey and David Harper, who kindly took and sent me some excellent interior photos. Besides the interior photos, I also got some much-needed photos of the suspension. My plan was not to go all out and recreate every little detail (which would also add a lot of time to the project), but to have just enough showing to look interesting when viewed from the open hatches. The majority of the basic interior was made from Evergreen .030" and .040" sheet and strip styrene. I won't go into a blow-by-blow account on how everything was done (which would make for a novel), but just highlight a few things and let the photos do the talking. Using the photos, I 'guess-timated' where the engine bulkhead and turret basket would be. The floor was built first, followed by the sponson areas and then the engine compartment. I wasn't sure if the area behind the turret basket was open or not, in any case I cut down a clear plastic bottle (container from a tube of CA glue, I believe) to rough in the area where the basket would be. The left side of the fighting compartment is largely taken up by the fuel tank, a very obvious piece. I built up the basic structure around a chunk of green florist's foam for support, which I shaped first to give me a three-dimensional visualization of the final shape and size needed before cutting the styrene pieces. The straps, which appear to hold the tank in place, were made from lead foil, textured by rolling a round file over top of the foil strips. On the right side, main items include (from



Main interior features being built up. Fuel tank on left side, details to the engine compartment bulkhead, halon bottles, and battery box on right side. The tube-like objects on the front sponsons are shrouds for the drive shafts that run to the rear water jet drive.



Centre removable bench seats are next, and the bilge outlet tubes are visible. These were made from a straight section of kit sprue, gently heated and bent were required. Side bench seats and folding seats at the back have been added. The figure is being tested for fit.



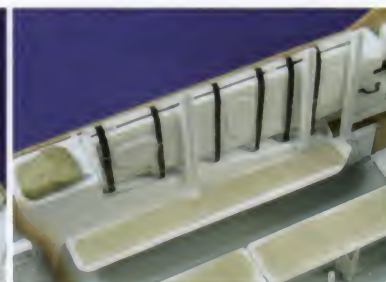
The non-slip texture created with RustoleumTM Brand Texture spray paint. New handles have been added to the interior of the large hatches.



Driver and Troop Commander areas. The seats are from an old Bradley interior, and radio racks have been built up behind the Commander's seat. The SINGARS radios are from Pro Art.



Apoxie Sculpt seat cushions added. Just visible is the turret basket area.



Final details. Seatbelts still need to be added, these were made from strips of lead foil.

front to back) jerry can racks, halon bottle mounts (for the fire suppression system), battery box, and frame for the older mounting of the radio systems. Bench seats were built up and cushions were made from Apoxie Sculpt epoxy putty (my favourite). The bilge pump outlet tubes at the back were shaped from straight pieces of sprue from the kit.

The engine compartment bulkhead was detailed with panels, hinges and a couple more halon bottles. To make the bottles I used a 'poor man's lathe' being my cordless drill. I filled up some suitably sized styrene tube with epoxy putty to make a solid tube, then chucked the tube in the drill and filed/sanded the ends to a spherical shape while the drill was turning. These were detailed with simple valves and mounted on a recessed ledge built into the bulkhead.

Detail to the Driver and Troop Commander's area was kept fairly simple, reasoning that the driver figure would block the view and the Troop Commander's hatch was going to be closed. Seats were used from an old Tamiya Bradley interior, and a basic instrument panel was built up. Immediately behind the Troop Commander's position are the re-located radio

racks, these were built to fit the SINGARS (SINGLE Channel Ground and Airborne Radio System) radios from Pro Art models. I also scratch built a toolbox, which was commonly seen in photos, and an unknown 'black box' shape (possibly part of the fire suppression system) between the radios and fuel tank.

The turret basket was built up on a frame of styrene discs, rod and thick strip. The floor grill was cut from aluminium screen, and to simulate the large hose for spent brass I wrapped copper wire around a piece of thick solder, and coated it with thin super glue. Upper hull detail was limited to an air duct again made with a length of solder wrapped with copper wire. Throughout construction of the interior, constant test fitting of the upper hull was required to ensure nothing interfered with the fit.

The interior of the vehicle is painted 'sea foam green', which I mixed up from Tamiya Sky with a little Flat Green. The floor is dark green, as are the seat cushions. Pastels were used to create a dusty, dirty effect. A selection of stowage including ammo cans, folding stretchers and packs were painted up and placed in the vehicle to clutter it up. Once I was happy with interior

finishing the upper and lower hull parts were cemented together.

SUSPENSION

The first step was to remove the moulded on details on the kit. A sanding drum in a motor tool does the trick, followed by a final smoothing with a sanding block. A new final drive housing plate was made, with a styrene tube used for the axle (the Friul drive sprocket fits over the tube axle nicely). Next came the suspension arm mounting plates. Note that these are all different sizes (except the 1st and 5th stations, which appear to be the same sizes). This is one reason I didn't just get the Blast Models update set, as all of the plates on their kit are the same size.

Shock absorbers were taken from a Dragon MLRS kit and modified to fit. A weld bead was added per reference photos between the plates made from Plastruct .040" 1/2 round rod. Return roller axles were also made from styrene tube and placed according to photos.

The Friulmodel tracks were assembled next. I prefer to use .020" brass rod rather than the supplied wire. Friul supply white metal bolt heads, which you must carefully cut off a sprue and attach to the end of the link over the pin, which was a bit of a pain, but ends up looking good. One oddity I encountered with assembly is



The completed and painted interior.



Tech Tip!

An easy way to make circles or rings in thinner sheet styrene (.010"-.030") is to use a circular drafting template. Position the template on the plastic, secure it with a bit of tape, and scribe around the circle with a sharp needle chucked in a pin vice. Just keep scribing around and around until the needle cuts through the plastic. It is best to do this on a hard surface such as a sheet of glass.



Planning the suspension changes. The original idea was to graft the Bradley suspension to the AAV hull, but it would still be missing some important detail. The suspension arms and mounting plates were carefully removed from the Bradley piece.



Kit suspension detail is removed and cleaned up. A new final drive housing and drive sprocket mount from styrene tube is in place.



Scratch built upper hull details. New armour plates, hatch spring housings, new style muffler. The grey patches are where the author has filled tool locating dimples with model filler.



Muffler guard was built up around brass strip supports and cut from a piece of aluminium screen.



Detail added to the inside of the rear ramp includes non-slip texture, handles and latches.



Missing detail added to the inside of the driver's hatch. Also visible are the locking handles on both hatches, raised Commander's periscope housing, and fine screen around the air intake tower.



UGWS turret detail. The tie-down loops were made from copper wire bent in a styrene jig. Vehicle Smoke Grenade Launcher (VSGL) mounts rebuilt and a signal flag holder added. The smoke grenades themselves are from the newer release of Academy's M1A1 Abrams.

that the tracks had a significant lateral curve to them when all the links are pinned together. Luckily some gentle bending worked most of the curve out, but there was still a little deflection when mounted on the wheels. I can only surmise the holes where the pins go in are moulded slightly off from perpendicular. The tracks were soaked first in vinegar (a mild acid), rinsed, dried, and then soaked in a metal blackening solution. The track pads were then brush painted in dark grey enamel. Once the suspension was complete, I fully painted and weathered the running gear and attached everything, as I could then attach the forward skirts and paint them later with the rest of the model.

EXTERNAL ARMOUR PLATING

The Kirin EAAK set was good for its time, as there was little reference available for the new armour package. I sorted through the parts and made the decision to replace most of the flat panels that sit on the roof and upper sides of the vehicle. The main reason being that these plates should be

'stand-off' armour plates, in real life raised off the hull by several centimetres, and the solid resin pieces did not capture this feature at all. As well there were some size and shape issues and a few pieces missing that should be mounted in front of and behind the main upper hatches. The upper hatch plates were measured and cut from .030" sheet styrene, mounted on .040x.030" strip blocks. Bolt heads were made by 'salami slicing' Plastruct hex rod. There is a flat, trapezoidal piece between the driver and commander's hatches that also needed to be scratch built, which fills in an open space. It is easiest to look at the under construction photos to see which resin pieces I used, and those that needed scratch building. The upper side plates (under

the stowage racks) were mounted on bars considerably longer than the roof plates. These bars were 3 mm sections cut from .040 x .060" strip. The stowage rack ends were each bent from brass rod (a challenge to get 4 identical pieces), with styrene rod bars, assembled with superglue.

Other upper hull additions:

- The large main upper crew hatches have counterbalance spring housings added from styrene tubing.

- Hinge pins added to engine hatch hinges from punched disks.
- Missing no-slip bars added to top of headlight guards from strip styrene.
- Screen added around circular housing beside driver's hatch.
- No-slip texture added to top of driver and commander's hatch, inside of crew hatches and inside of rear door. Masked off and sprayed with Rustoleum™ Texture spray, which dries to a fine, lightly textured finish as the name suggests. ▶



The running gear is then painted, weathered and fully assembled before moving on. Here the Kirin side armour pieces are added, and new or more accurate pieces are scratch built where necessary.



Completion of the suspension. Note the different size mounting plates, shock absorbers from the Dragon MLRS kit, and horizontal weld bead between the plates. The forward side skirts have been removed from the front sponson area to ease assembly.



Running gear finalized with Bradley road wheels and idler wheel, Dragon MLRS return rollers, and Friul drive sprocket. This is the most accurate drive sprocket for AAV7's, Bradley's and the MLRS.



Assembly of the Friulmodel tracks. Although nicely detailed and fairly easy to assemble, they had an annoying curve when fully assembled.



- Handles added to inside of large crew hatches.
- Commander's periscope guard raised on strip blocks, missing periscope added from clear lexan.
- New style muffler scratch built from tubing and added, protective screen from aluminium screen. A paper pattern was first made to ensure shape and size before cutting the screen.
- Screen added over engine intake and outlet grills.
- A small bit of screening added to the open rear of the smaller box to the left of the turret.
- The semi-circular cover for the external fire suppression pull handle needs a blanking plate and the handle added.
- Two raised radio antennae masts need to be added, one on each side. The SINCGARS radios use a different style of base than the ones provided in the Pro Art set, again these cone shapes were turned on the drill. There is an additional mount and mast added for the EPLRS (Enhanced Position Location Reporting System), beside the rear left radio antennae.
- Driver's hatch interior detailed, handles added to outside of Driver and Commander's hatches.

FINISHING

My current finishing technique is to first prime the kit using a lacquer-based primer from a spray can. Using lacquer ensures a good bond with materials like resin and metal. I masked off the pre-finished running gear and a piece

of index card was cut to fit the rear hatch to protect the interior. I sprayed the base camouflage colours using Tamiya's NATO green, brown and black. When cured, the armour plates were masked off and sprayed straight forest green as these were usually added later to the camouflaged vehicle. A few panels were masked off and sprayed brown as seen in some photos. Instead of a wash, I used the 'post-shade' method and sprayed thinned Tamiya Smoke into and around recessed detail and panel lines.

Markings were limited to tan call signs sprayed on the side skirts through a homemade masking tape stencil. In OIF, marking were commonly seen on the sides of the turret or the skirts. There would also be similar markings on the rear hatch, and the Marine 6 digit serial numbers front and back. My example, ^ E/2/3 represents First Platoon, Echo Company, Second Battalion, Third Marines, but I confess I may have made a mistake and misinterpreted a 5 for a 3 in a reference photo I was using, so it should have been E/2/5.

For the dusty appearance, I mixed up a slurry of dust coloured pigment (in my case, I use unsanded tile grout, which has a similar effect, but cheaper!) and white spirit. This slurry is slopped on the entire vehicle (don't use this method on enamel base coats, acrylics only) and dried thoroughly with a hair dryer. Then most of the dried pigment is brushed off with a soft, wide brush. I suggest

doing this outside as a lot of dust is created!

The entire model is then sprayed with an acrylic flat coat to soften and seal in the pigment. I will demonstrate this technique in a little more detail in a future article. Periscope faces were made using the old trick of cutting thin strips of exposed film negative and attaching with Microscale Crystal Clear.

STOWAGE

The AAV's were literally covered with external gear as they made their journey across Iraq, which greatly adds to the appearance of a model. I used stowage from Dragon and the newer Tamiya accessory set. The rubberized covers over some of the packs were made by cutting out an oval piece of vinyl rubber glove (the blue coloured ones) and stretching it around the pack, then sealing the back end with superglue, which seemed to bond quiet well. Don't forget everything needs to be strapped down; I used thin strips of Tamiya masking tape. The roll of razor wire was made from cutting out a single strand of fibreglass window screening. Some thick model ship rope was rolled up to resemble the rope bumpers tied to the front of the vehicle.

FIGURES

Luckily as I was nearing completion of the model, Warriors had just

come out with some current US Marines in action poses. These fit my diorama idea perfectly. I ended up repositioning the driver's head so that he would be looking in the direction of the hypothetical danger. I used oils to paint up the flesh areas, and a combination of craft acrylics and Vallejo paints to simulate the MARPAT digital camouflage of the uniforms. Briefly, the colours I used for the MARPAT were from DecoArt's Americana line of craft acrylic paints, available at large craft stores. I find them comparable to some of the more expensive modelling acrylics out there. For the base coat, I used Light Mocha, followed by 'splotches' of Khaki Tan + Light Mocha 60:40, Autumn Brown + Light Mocha 60:40, then small dots of straight Autumn Brown. Finally, I went over the pattern with small dots of Light Mocha again to enhance the effect. The idea was to simulate the digital effect rather than reproduce each little square pattern.

DIORAMA CONSTRUCTION

I envisioned the AAV crew returning fire at some distant building, perhaps at a sniper. The concrete barricades dividing the two highway lanes were cast in plaster from a mould of my own master. This was shaped from



Initial placement of items on base. The 'New Jersey Barricades'; basic shape carved/sanded from green florists' foam and coated with thinned wood glue, silicon rubber



The empty spots in the roadway on the other lane have been filled with rubbish; the tires are from 1/32 scale car kit, some newspapers and small bit of paper also added. Grass is simulated with deer hair. Road signs and spent brass casings are also added.



green florists foam, coated with thinned wood glue (PVA). The barricade was based on a 4x8 foot 'New Jersey' barrier I had found on an internet search, but it would seem 3-foot high barricades are more the norm. The asphalt roadway is simply sections of 320 grit wet-dry sandpaper, the joints disguised by a white glue/black acrylic mixture applied through a syringe to simulate the tar used to repair expansion cracks in the asphalt.

I wasn't happy with the empty space on the other side of the roadway, so I found a couple of 1:32 car tires to place along the barriers, and made up some roadside litter of newspapers and miscellaneous bits of paper. Digitally photographing our daily paper, adjusting the size, and printing on a photo-quality Inkjet printer made the newspapers. A couple of road signs were also added, the '30' speed sign from a bonus sticker set contained in a

older issue of TMMI, and the speed bump sign from that provided in a sign set made by Echelon Fine Transfers. Finally, I added some spent 5.56 mm ammo casings from .015" rod painted in a brass colour, and cut up in my 'Chopper' tool. I prefer this to snipping off brass rod, as this always seems to leave a crimped end.

CONCLUSION

I was very pleased with the way everything turned out; the Warriors figures are a great addition and really set the scene. I ended up winning the Missing Lynx Expo contest, quite an honour considering there were some fantastic models and figures finished from modellers around the world. This was also my first attempt at scratch building a rather complex interior, and I found that by breaking construction down and working from the basic shapes to the smaller detail bits, it went quite smoothly. ■



MEET THE AUTHOR

Hi! I'm Jim Carswell. I live near Stony Plain, Alberta, Canada, just West of our Capital City of Edmonton. My earliest model I can remember building was a push prop biplane thingy when I was perhaps six, and I have fond memories of building Monogram armour kits and trying to make dioramas like Shep Paine when I was a little older. When I joined our local IPMS Club in 1983 or so, I was in to 1:72 aircraft (I still have quite a stash of unbuilt aircraft kits—gasp!) Luckily, our Club has within it's membership some of the Hobby's well known names like Ron Volstad, Tom

Cockle and Gary Edmundson (sorry to drop names Boys!) and with that inspiration I was soon hooked on armour. I'm now 40, with an understanding Wife (Heli) and two great girls who are now seven (Katriina) and four (Annika). I have built master models for Hobby Fan (Cougar WFSV) and Maple Leaf Models. I've been lucky enough to meet modellers from around the world at the AMPS Nationals in 2001 and 2002 and at Euro Militaire in 2004. I have also done a few magazine articles here and there, and I sure hope to write more for this great magazine.

Modelspec

1:35 Tamiya AAVP7A1 with UGWS Kit No. 35159

Materials used

Injection moulded sand coloured styrene, one piece vinyl tracks, polycaps, and waterslide decals.

Paints used

Tamiya Acrylics: XF-67, 68 and 69 NATO green, brown and black, XF-58 Olive Green.
Humbrol and Model Master Enamels used for detail painting.
Vallejo and Americana Acrylics used for figure uniforms.
Polly-S Clear Flat.

Accessories used

Friulmodel white metal individual track set for Bradley/LVT7/MLRS late type 'Bigfoot' # ATL-079,
Kirin resin EAAK armour set #28509(OOP),
Pro Art US Radio Set SINGARS #PAU-35020,
Tamiya Modern US Military Equipment set #266,
Warriors OIF Marines figures: WA35576 AAVP7 Crew, WA35574 USMC OIF Set #1, and WA35575 USMC OIF Set #2.

References used:

Special Ops, Journal of the Elite Forces and SWAT Units, Vols 26 and 27, Debay, Concord Publications.
ISBN's 962-361-066-1 and 962-361-067-X
Vehicles of the USMC in OIF, Harper, Hard Corps Models.
THE book to have if you are considering building current USMC vehicles like the AAV7, LAV-25, and M1A1.
Amtracs: US Amphibious Assault Vehicles, Zaloga, Osprey Vanguard 45. ISBN 0-85045-748-3
Web:
Ferraemole, Italian Armour www.ferraemole.it/indici/index_tank.htm
Modern Armour site: (webmaster unknown) <http://members.tripod.com/modernarmor2/aavp7a1.htm>
1/9 scale RC model with good reference photos: <http://www.technogap.com/aavp7a1.shtm>
<http://www.technogap.com/static.htm>
Official USMC website: <http://www.marines.mil/marinetlink/mcn2000.nst/homepage?readform>
Worth it to search through the various galleries.
Pawel 'Vodnik' Krupowicz's review of the kit. <http://vodnik.net/pages/amtracs/aavp7a1.htm>

- ☒ Basic kit provides an accurate and straightforward build out of the box.
- ☒ Option of having all hatches workable seems moot without any interior to show off.

Available from

Most good Hobby Shops, Online retailers.

Rating ●●●●●○○○





References - AAV7A1 RAMS/RS

In-country reference photos courtesy of the USMC via David Doyle.
Detail reference photos used with permission by Mike Mumme (MSGT USMC Ret).
Photos taken at Marine Corps Air Ground Combat Centre, 29 Palms, CA on 14 April 2005.
The vehicle is from D Company, 3rd AAV Battalion. Measuring stick seen in photos is marked in inches and feet and is three feet in length.

SAQLAWIYAH, Iraq - An amphibious assault vehicle provides security along a dirt road here July 21 during Operation Hard Knock. AAVs assisted Company A, 1st Battalion, 6th Marine Regiment personnel and Iraqi Security Forces in sweeping through northern Saqlawiyah's Al Zakarit district to look for weapons and insurgent activity, as well as gather census information on the populace.

2nd Marine Division_Photo Date:07/21/2005



CAMP RIPPER, AL ASAD, Iraq - Marines of the Regimental Combat Team - 2 security team travel in convoy in an Amphibious Armoured Vehicle for a cordon and knock mission, April 15. The security team is the regimental reserve force for Regimental Combat Team 2, responsible for a myriad of tasks from security and sustainment operations to setting up snap vehicle control points.

Submitting Unit: 2nd Marine Division
Photo Date:04/30/2005



THAR THAR REGION, Iraq - Lance Cpl. Bee Thao, an infantryman with 2nd Squad, 2nd Platoon, Company B, 1st Battalion, 6th Marine Regiment, provides security behind an amphibious assault vehicle here June 19. Thao's unit was one which participated in Operation Dagger, a five-day long effort to rid regions north of Fallujah of insurgent activity.
Submitting Unit: 2nd Marine Division_Photo Date:06/19/2005



Amphibious assault vehicles from the AAV platoon, Battalion Landing Team, 1st Bn., 3rd Marines, 31st Marine Expeditionary Unit sit under the Kuwaiti sun on Camp Buehring. The MEU is deployed to Kuwait for desert acclimatization and sustainment training in preparation for possible actions in the U.S. Central Command area of operations in the Global War on Terrorism.
Submitting Unit: 31st MEU_Photo Date:10/06/2004



CAMP RIPPER, AL ASAD, Iraq - Lance Cpl. Matthew Snyder, a 20-year-old Tampa, Fla. native and rifleman with Beowulf, takes up a security position near an Amphibious Armoured Vehicle for a cordon and knock mission, April 15. Submitting Unit: 2nd Marine Division_Photo Date:04/30/2005





References - AAV7A1 RAMS/RS



The interior of the AAV7 looks very cluttered even before a platoon of Marines fill it with all their personal gear. Note the red halon fire extinguishers and the headlight assembly stowed on top of the right hand locker.





Another key feature of the up-graded AAV7 is the new muffler system, which has been completely re-designed. As can be seen from the measuring stick, this muffler is a big piece of kit, three and a half feet long by a foot in diameter.



A selection of detail photos showing the Bradley style suspension components to good effect. On the photo below it is of interest how much paint has flaked off from the shock absorber mounting plate and idler hub cap.





M4

Is the **Editor** getting addicted to small scale?
This is his second in two issues.

MARVELLOUS

Not only has Dragon been continuing to spoil 1:35 armour modellers recently. But are also treating fans of 1:72 armour with some absolutely stunning kits, we could only dream of a few short years ago.

IN THE BOX

Apart from the usual top quality grey styrene parts, Dragon have included a set of their new DS 100 glue-able orange vinyl tracks, along with a neat little etched brass fret, which includes a set of front fenders, headlight guards

and rear hull mounted stowage rack. Markings are included for four vehicles including one from the Famous segregated unit, the Black Panthers, Germany 1945, there is also one marked as a Beute Panzer, (captured tank). But my favourite is the M4 in a three colour scheme from the 9th Armoured Division. All of these vehicles can be seen in the Concord publication, Sherman at War 1943-45 by Steve Zaloga.

CONSTRUCTION

Construction starts with the lower hull and running gear, as one would

expect on a kit so well engineered and with so few parts doesn't take very long. I did however discover that when building up the suspension units make sure the part C3, the wheel assembly if fixed in place before trying to fit the C4, the VVSS damper unit; otherwise it all gets a bit fiddly.

With the lower hull complete our attention is turned to the upper hull, again all very straightforward. At this stage Dragon highlight the option of using either the plastic mudguards and headlight guards or replacing them with the etched parts, I decided to stick with the

plastic mudguards, these looked fine, so I didn't see the need to swap them. I did however choose the etched brass headlight guards over the plastic parts; it is with parts like this that there really is no substitute for good old etched brass.

Moving to the rear of the hull, the parts to be added here consists of only the shovel, tail lights, lifting eyes and the rear stowage rack, again this part is included as either a brass or styrene part, I chose the brass part, but with hind sight should have used the plastic part as mine



The rear idler mounts are very weak, these had to be strengthened with wedges of plastic card.



The detail incorporated is exceptional, including casting numbers and a finely detailed cupola.



The Goffy resin stowage and lead foil ID panel. The tie down strap was made from Tamiya tape.



The tiny etched brass headlight guards supplied in the kit, really do add an extra bit of finesse as only brass can do.

The M4 has received an initial coat of Vallejo Modelair olive drab, which on its own looks a little dull and lifeless.



To add some life to the monotone base colour, Tamiya olive drab has been airbrushed around detail and down the hull sides.

In this final shot, Vallejo hemp has been mottled over the previous colours. At this point it looks to pale, the colour wash stage will tone this down considerably.

ended up completely covered in stowage anyway.

TURRET

Looking at the instructions you would think you were building a 35th scale kit as the parts breakdown is almost identical, there is the option of two different single piece gun barrels, one with and one without muzzle break. Thanks to Dragons slide mould technology, they both have hollow ends, making the only extra work, before fitting the removal of the mould seam running the length of the barrel.

With the gun assembly complete the turret halves can be mated; only a tiny amount of filler was needed to blend the join between these parts.

PAINTING

After a quick blast with some Holt's acrylic grey aerosol primer, it was time to add some camouflage. As usual the Vallejo range was

my paint of choice, I find them so easy to work with and give a finish second to none.

I base coated the entire model with Modelair Olive Drab, this was followed by misting on a patchy coat of Modelair brown violet. At which point I would have normally moved straight on to the weathering, but not being used to working in this scale I felt the effect wasn't strong enough; so I thinned some Tamiya olive drab heavily with Tamiya's own thinners and with the pressure set to 15psi traced around various details, panel lines as well as adding some vertical weathering streaks to the hull gave me a look I was happier with. Finally hemp was mottled over the centre of panels etc to help with the faded look.

For the colourwash I tried the new oil paints marketed by Mig Productions, I'm happy to say they are every bit as good as the artists

grade paints I normally use.

I ended up only using the registration numbers on the hull side from the decal sheet, these were fixed in place using Johnson's Klear, with a final coat of matt varnish finished I could put away the airbrush. All that was left to do was some detail painting and weathering with Mig Productions rubble dust pigments.

CONCLUSION

This is the first of these Dragon 1:72 kits I have built and I must say I really enjoyed it, to start

with I wasn't overly keen on building small scale armour. So I thought it best to build one of my old favourites, the Sherman. One thing I was amazed by was the fact that this M4 exhibits raised welds on the upper hull, something that none of the injection manufacturers have managed to do so far on the larger and supposedly more detailed 1:35 cousins.

This has been a very pleasurable diversion from my normal interest in the bigger stuff. I can honestly say I can't wait to build more if they are all as good as this. ■

The stowage came from the Goffy range of 1:72 accessory sets. The day-glo ID panel was made from lead foil.

Modelspec

Dragon 1:72 M4A3(76)W VVSS Sherman Kit No.7271

Parts used

Goffy stowage from Sandbagged M4A1 conversion.
Calibre 72 Sherman stamped wheels 72008.

Paints used

Vallejo Olive Drab, Hemp, Black/Grey, Brown Violet
Tamiya Olive Drab XF-62
Lifecolor Tensocrom oil (www.cammett.co.uk)
Vallejo Magenta fluorescent pink

✓ Great fit, excellent detail.

✗ weak idler mounts.

Available from

Dragon - All good model shops

Rating ●●●●●●●●





SOMETHING SLIGHTLY DIFFERENT

Darren Thompson

Old & New Dragon combine, to offer a Tank Hunter with a twist.

Dragon have offered several version of the Jagdpanzer IV over the years and this latest one finds them making use of some of their existing moulds, along with some brand new parts, to make the lesser known, pre-production 'A-O' series.

The lower hull, suspension and running gear, are identical to those in Dragon's earlier L70 and L70/A kits. Whilst these aren't up to the mind-blowing standard of Dragon's more recent PzIV offerings, they will build up perfectly well and show a good amount of detail, including the non-working, individual track links.

The upper hull is, however, all new and includes some nice touches. The numerous weld seams are very subtly done, as is the texture on the gun mantlet. The superstructure roof is an excellent fit, finely detailed and has separate parts for both the crew and monocular sight hatches. The rear engine deck is also separate, as are both the forward MG port covers, allowing them to

be positioned open, or closed. Another detail that caught my eye, was the moulded wire cable to the front Bosch light, which is about as good as it gets in plastic.

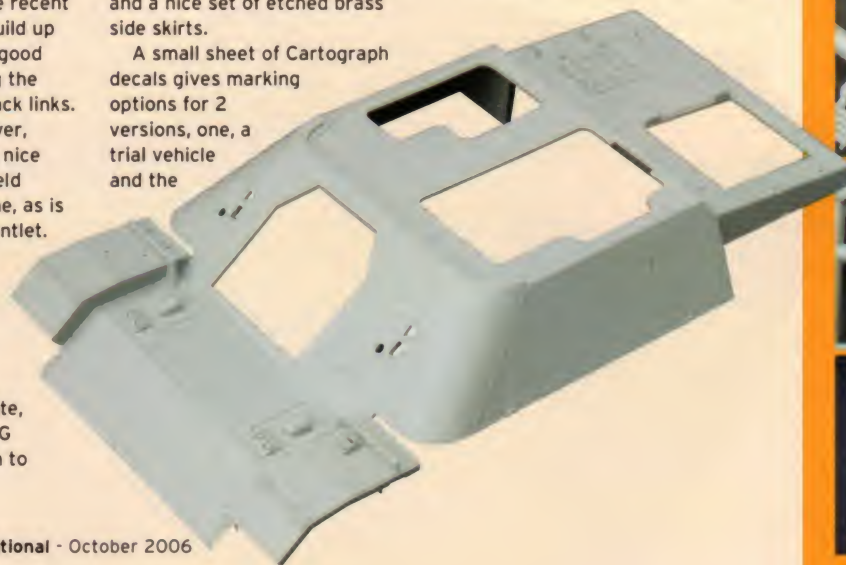
The on vehicle tools and multi-part jack are some of Dragon's more recent tooling, so show crisp moulding and some fine details.

A clear sprue is included for the periscopes and, whilst this kit isn't quite as heavily metallised as Dragon's recent kits, it does include a turned aluminium barrel and a nice set of etched brass side skirts.

A small sheet of Cartograph decals gives marking options for 2 versions, one, a trial vehicle and the

second, a vehicle serving with the Panzer Lehr Division, although I couldn't verify whether this vehicle actually served with them or not.

This kit sees Dragon returning to their older, more familiar format. On the downside, you don't get the level of detail we've come to expect from their latest offerings, but on the upside, it will still build into an excellent replica in half the time, Oh, and you can get all the parts back in the box! ■



THE BUFFALO'S RIDE

To conclude the Editor's latest diorama, we look at the resin Diamond-T tank transporter (M-19) from Scale-Line and the simple scene in which they were placed.



My original plan was to make this a rather large article with a million words of text, but space and sanity persuaded me to change that idea. What we have decided on is to give a brief overview to the kit, because after checking the Scale-line web site this model does not seem to be available anymore.

This kit was sent to the TMMI office back in 2002, where it was eventually passed onto me for a review, well one thing lead to another, including the fact I spent most of that year keeping my head down in Afghanistan. Well anyway it never got finished, until the end of last year, at this point it was decided it may be better suited to MMI instead.

CONSTRUCTION

With most resin kits the most time consuming part of the construction is the removal of the parts from their casting blocks, is inevitably a messy process.

I tend to try and get this all out of the way before attempting to assemble the model itself.

Because this kit has been simplified construction progressed quickly due to the fact there wasn't actually that many parts for a model of this size. It was during the construction that Marcus Nicholls lent me the Allied Axis book on the Diamond-T (I will give it back, honest). After a quick look at the excellent reference photos it contained it became glaringly obvious there were some accuracy questions regarding the

kit, especially the Rogers trailer. At one point I seriously thought about rebuilding the trailer from scratch, but in the end decided to persevere with what was in the kit.

In the end the rather poor instructions were completely covered in red ink where I had made footnotes to remind me of bits missing or where extra detail was needed. I don't consider myself a so-called "rivet counter", but one look at some basic reference had set the alarm ringing for me, I could not just simply ignore how many small and not so small details had been left out. I think it would be pointless to name them all as I can't imagine there are many of you out there with one of these on your workbench poised to get on with it after reading this article.

What I will do is highlight some of the areas of interest with the aid of the accompanying photos and captions.

PAINTING

Before I gave the model a coat of primer I thought it best to give the entire model a light rub with a Scotch Brite pad to give the paint a nice key on this shiny resin.

Once the primer had been sprayed on using an aerosol can, I then checked the model for imperfections, air bubbles etc. before adding the camouflage colour.

The Diamond -T was sprayed using an Aztek A470 airbrush with the pressure set to 35 psi for the broad coverage, and for the fine work the pressure was reduced to



The tyre fenders were made from the spare wheels supplied in the Diamond -T kit, these were hollowed out using a mini drill fitted with a round headed jewellers burr.



The cab roof star is a dry rub decal from Archer fine transfers, available from Historex Agents. Note the orange painted Methyl Bromide fire extinguisher.





Drivers foot pedals had to be sourced from the spares box as none were included in the kit. The brass tube is to support the steering wheel.



The two spare wheel retraction points were missing from the trailer side, these were fabricated from plastic card and MR Models bolts.



Scratch built spare wheel mounting points were added to the underside of the trailer, they were very noticeable by their omission.



The author added the missing power take-off for the winch, to simulate the chain the author had to use nylon thread.



The trailer taillights were detailed, again from etched brass from left overs in the spares box. Luckily all US taillights are a standard pattern.



The bolt heads on the castings suffered from air bubbles, they were carefully shaved off and replaced with more MR Models bolt heads.

◀ 15 psi. For the actual colour I first pre-shaded it with Vallejo Modelair Olive drab, this was followed by a thin coat of Model color brown violet thinned with 60% water. This allowed the olive drab shading to still show through.

Decals had to be sourced from the spares box as none were supplied in the kit.

Thankfully over the years I have amassed a good collection of decals, and with the aid of the issue 6 of the Allied-Axis, which features some excellent photos on the M-19 in action with the British, thankfully the markings are clearly visible.

Your best bet for obtaining decals for Allied tank transporters will be from Accurate Armour, who

sell the sheets supplied in their kits separately, check out there

DIORAMA

I wanted to keep the diorama as simple as possible, so as not to distract the viewer from the actual vehicle, secondly by the time I had built both of these models I was pretty much burnt out, so felt I wanted the groundwork to be quick and simple to complete.

The actual base was basically a plank of MDF from just Bases, which I had made so there was only a small amount of space all around. This would limit the amount of dead space that I would have to try and think of something to fill it with.

I decided on a scene that is showing the loading of an LVT that has been made ready for an up coming amphibious operation during the advance into Germany

My thinking was that the LVT would be kept on a unpaved area to save wear on its water propelling tracks; therefore I split the groundwork roughly 50/50 between unpaved and paved. This I thought would make sense realistically and add some interest to the groundwork, for the paved area I used a sheet of Evergreen plastic card, which is pre-scribed in a tile pattern, this was fixed in place with PVA glue and left to set overnight.

For the dirt area, I first scored

the MDF with a Stanley knife before applying a thin layer of ready mixed interior filler; the Score marks really help the filler bond to the baseboard. The wet filler was then stippled with a 2" paintbrush, before leaving for a few minutes to let a skin form. Thinned PVA glue was then gently brushed on and then sprinkled with dried crushed soil from the garden.

Again this was left to dry off for a few minutes before the trailer and LVT were pressed into this mix, then left to dry fully.

Once the groundwork was completely set, it was airbrushed in appropriate colours before small patches of static grass were added to some further interest.



Tech Guide - TYRES



To paint and weather all the tyres on the Diamond -T, I chose to use the same technique that I used on the Centauro armoured car to save the failed original technique I had tried. This involves first spraying all of the wheels in an appropriate tyre colour, in my case Vallejo black/grey.



Generally acrylics can be weathered with enamel-based washes straight away, but in this case as the wheels were left 24 hours to make sure the paint had cured fully. The next process was to mix up the dirt to be applied and for this I used a combination of Mig Production pigments, Humbrol enamel



thinners and Revell matt varnish (photo 1). The pigments were mixed into a paste with the thinners and varnish; this paste was the painted onto all of the tyres (photo 2). As soon as all the wheels had been painted in the dirt mix, it was now time to remove the excess. To do this I use white spirits and baby



The Rogers trailer has been painted entirely with an airbrush, including Humbrols polished steel, which will be buffed to a shine once fully dry. A lot of work is still to be done at this point.



Weathering powders combined with pastel chalks have been added to give the trailer a well used look.



The track marks from the trailers previous load can still be seen, no doubt a Sherman fitted with 3 bar cleat tracks.



Compare this shot to the one above, and the effect the weathering has on the finished model, including the tyres.

FIGURES

The crew figures all came from the Canadian manufacturer Ultracast, these were all painted with Vallejo acrylics. The neat shoulder patches came from Archer fine transfers, these dry-rub decals are so much easier to apply than trying to paint them free hand as I have tried and failed many a time.

CONCLUSION.

Now it's all finished I feel very pleased with the final result, however and it is a big however. I don't think the Scale line kit is worth the money, when the model was sent to me the price pencilled on the top of the box said £275, well for the same kind of money,

you could get a Accurate Armour Oshkosh tank transporter for example, which contains a much better detailed model, decals, brass, good instructions and a box so full that you feel you are getting your money's worth. This kit in comparison was very basic, there wasn't a lot to it and the instructions were not great.

I believe my conclusion is fair, based on the fairly large amount of resin kits I have built over the past few years, and having built samples from most of the major resin manufacturers I feel I can give an unbiased opinion. This one I'm afraid to say hasn't been one of the best. ■



The fuel stains were replicated by washing on thinned Tamiya clear yellow mixed with smoke. Water was used to dilute the paints, the Tamiya thinners could have lifted the base coat of Vallejo acrylic.



The weathering streaks look quite garish in this photo, but after all the other weathering processes have been applied, this will look far more subdued and realistic.



cotton buds (photo 3). A wetted end of the cotton bud is wiped around the tyre surface to remove all the excess dirt, leaving only the pigment mix in the treads and recesses (photo 4). Again once all the wheels had been wiped of the excess dirt, the next process could begin, for



this black pastel chalk is used to blend and soften the previous stages. To do this I rub my index finger on the pastel chalk stick and then rub this chalk into the tyre. In photo 5 we can see the left wheel is before and the right after the chalk has been applied, the difference is subtle but definitely makes a



difference. It's also quite a quick way to paint and weather 34 wheels! ■



The blue bench vice helps to add a splash of colour. The helmet with liner is from Canadian manufacturer, Ultracast, the gloves are from an old Accurate Armour etched brass fret.



The dart board was cut from a plastic card disc then masked before painting all the segments, the darts have been put away for safe keeping! The Tilly lamp came from the Tamiya Cromwell kit.



Humbrol polished steel buffable paint, combined with graphite powder give a realistic metallic sheen to areas of high wear. The handle at the top of the picture is the parking brake for the rear wheels.



The sprayed mud effect around the front wheels of the trailer was achieved by mixing Mig Productions pigments with thinners, then "flicked" on by running a thumb over the teeth of an old toothbrush.



The fitters toolbox came from the Tamiya Tiger engine compartment set, where as the pouch which contains the files and pliers, came from the now defunct KMC range of resin detail sets.



The spares box always comes in handy for cluttering and filling empty corners for that, lived in look. Light beige pastel chalk was rubbed into the deck to simulate the dusty look and highlight the wood grain.



With the LVT removed we can see the weathering effect the author had applied to the tow ramps and rear end of the ramp. Note how the wheels have been pressed into the groundwork to give the feeling of weight.



The decals all came from the Accurate Armour range, a white artists pencil was used for the chalk writing on the centre of the bumper. The Diamond -T emblem below the radiator cap was added from fine fuse wire.



Modelspec

Scale-line Diamond - I tank transporter M19

Kit No.S135-040

Materials

Accurate Armour decal sheet for the Scammell

Pioneer transporter DEK100

Ultracast figures

British Tank Commander UC35029

British Tank crewman UC35035

British Tank crewman with fuel can UC35032

Paints used

Vallejo - Modelair olive drab, Modelair black/grey

Modelair hemp, Model Color brown violet

Model Color matt varnish, Model Color German orange

Model Color red leather

Tamiya - Clear Red

Humbrol - Polished steel

Games Workshops - Mithril silver, Chainmail

- ☒ It's a Diamond - I tank transporter!
- ☒ Lots of air bubbles, very basic detail, not very accurate, poor instructions, no decals or painting guide, very expensive.

Available from

Scale-line modelouw

Bakkerstraat 22, 6671 AB, Zetten, The Netherlands

www.scale-line.com

scalelinemodelbouw@hotmail.com

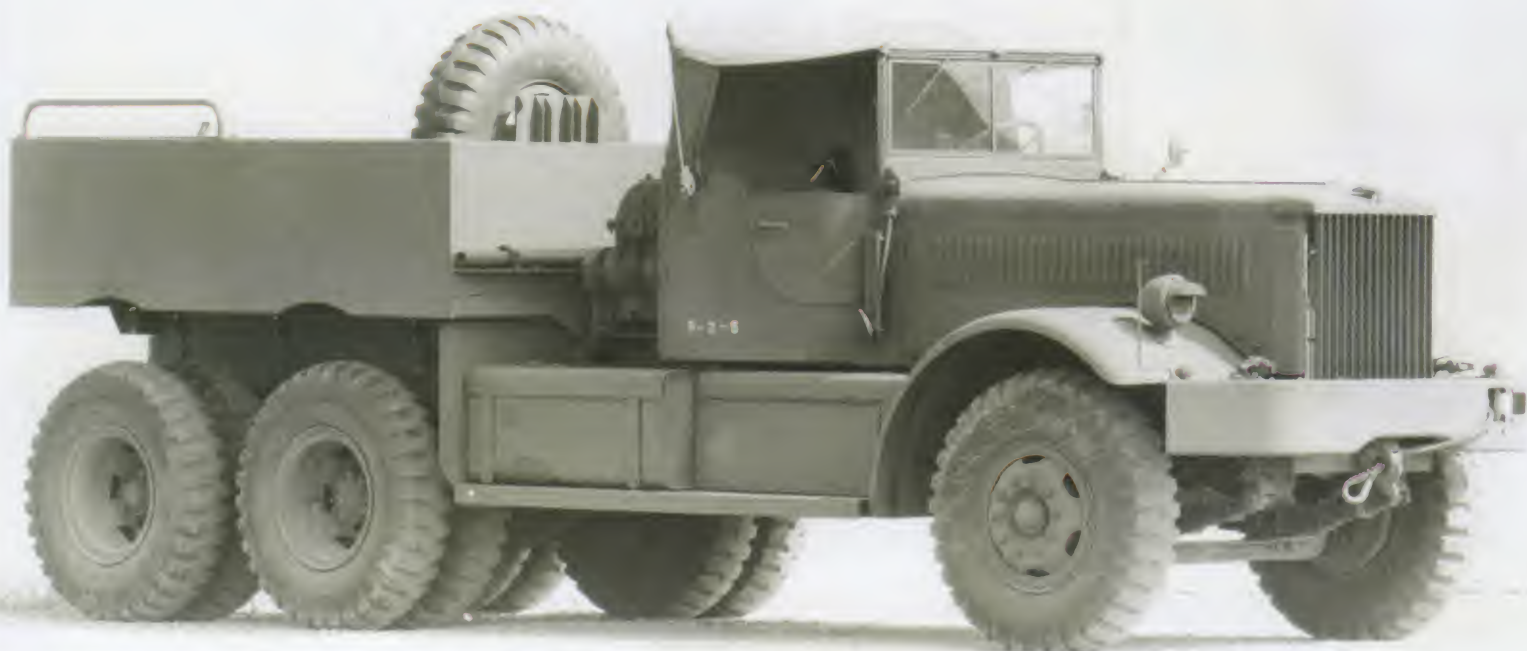
Rating ●●●●○○○○





References - DIAMOND T

The winch cable identifies this Diamond-T as a Model 981 (M20). These vehicles were built with both hard and soft cab roofs.



PGO-1143 7-14-44
S.P.G. Prof. & Veh. #2-260(R-2-5)
U.S.Reg.#551083

ORDNANCE OPERATION - STUDEBAKER PROVING GROUND

Truck, 12 Ton, 6x4, M20, Tank Recovery - Diamond T
3/4 Right front view of vehicle

Vehicle Test Miles 0
Recovery - Diamond T

THE FORGOTTEN DIAMOND T

David Doyle

During WWII the Chicago firm founded by C.A. Tilt produced a myriad of war machines. Company advertising of the time featured the firm's halftracks prominently, and to many military transport buffs today the name "Diamond T" is synonymous with four-ton trucks fitted with Holmes recovery beds.

Almost forgotten are the powerful prime movers the firm developed in 1940 for the British Purchasing Commission. Designated M20, the 12-ton 6x4 was powered by a Hercules diesel engine - a definite indication of the truck's "for export" origin, as the U.S. Army at this time had a very "pro gas (petrol), no diesel" stance. The massive 893 cubic inch (14.666 litre) model DFXE Hercules engine

required for its tank Transporter role was housed beneath a hood almost six feet long!

Just to the rear of the cab was a Gar Wood 5M723B 40000-lb pull winch, and a ballast box was mounted to the rear of the winch and above the tandem axles. Weight was added to this box to increase traction to allow the truck to pull the heavy loads with which its trailer was burdened.

The earlier model trucks, the Model 980, had 300 feet of wire rope for the winch, which could be played to the rear to pull disabled tanks onto the trailer. The later trucks, the Model 981, had 500 feet of wire rope, and a pulley and fair lead arrangement which allowed the rope to be fed through the front bumper and used for self-recovery.

The powerful diesel engine drove the rear axles through a four-speed Fuller transmission and a three-speed Fuller auxiliary gearbox, which combined gave the truck the ability to tow loads well in excess of its 115000 rated towing capacity, but its top speed was limited to 23 miles per hour. Air brakes stopped the vehicle. Ten 18.00 - 20 tyres were mounted, with a spare stowed just behind the cab.

M20 truck and M9 trailer were such an intimate combination that the pair was assigned its own classification of M19. Of course the reason for this can be traced to the Purchasing Commission's original intent - to secure a means of recovering disabled tanks. The M9 was a full trailer, rather than a semi trailer, which made the

combination challenging to reverse, an unfortunate situation for a recovery vehicle.

To support the weight of its cargo, and distribute same over a wide area - thereby lowering ground pressure - the trailer was fitted with no less than twenty-four 8.25x15 tyres! Eight of the tyres were on the steerable front axle. An A-frame-type drawbar connected this axle to the prime mover, the drawbar's lunette ring being accepted by the pintle hook at the rear of the prime mover. The remaining sixteen tyres were located beneath the rear of the trailer, which itself was made of welded steel construction with numerous integral tie down rings and pulleys.

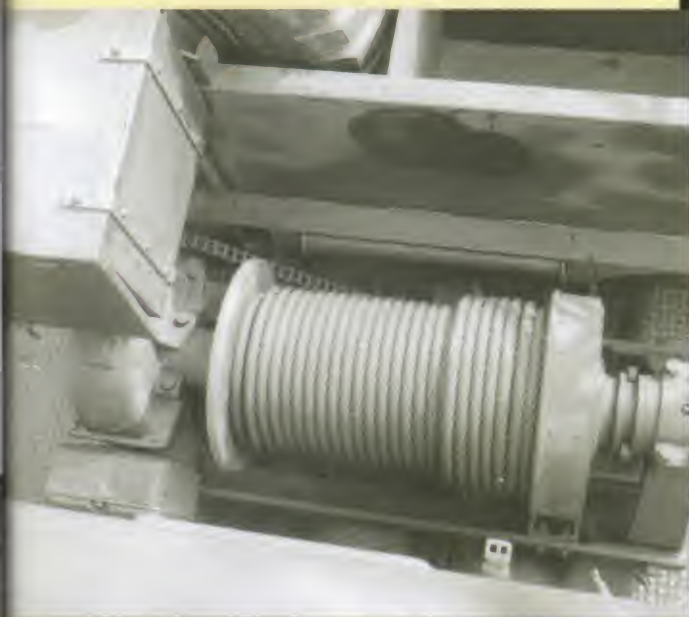
Hinged loading ramps were located at the rear of the trailer



▲ A US Diamond-T hauls an LVT-2 through a battle-scarred town. Note the large Allied star on the LVT's ponton.



▲ More transporters loaded with M10 chassis, possible M35 prime movers, because of the box-like structures it is impossible to tell if they have turrets. The crews seem to be having a rather relaxed briefing.



▲ Top view of the winch, just visible is the chain. This chain drives the winch via a power take off device from the prop shaft.

deck, and four steel chocks were also provided. The payload capacity of the M9 was 90000 pounds. Despite being forever associated with Rogers in the minds of enthusiasts - no doubt because of their design work - Winter-Weiss was the leading producer of these trailers with a total of 1827. Other builders and their production totals were Rogers 1148, Fruehauf 1632, Checker Cab 344, and Pontier-Williamette 1192.

Neither the M20 individually nor the M19 combination was classified as Standard by US Forces. Rather the vehicle was designated first Substitute Standard and then was downgraded to Limited Standard in June 1943, subsequent to the standardization of the M26 Pacific as the U.S. Army's Standard tank



transport.

The U.S. military's failure to classify the vehicle as "Standard" can likely be traced to its non-powered front axle and use of a diesel engine. Diamond T records indicate 6554 of the trucks were built. Despite a few reports to the contrary, no records exist

that indicate that any powerplant other than the Hercules diesel was installed in these trucks as part of factory mass production.

However, not surprisingly given its origins, the M19 was widely used by Commonwealth forces. Reportedly, examples repowered with Rolls-Royce F6FNL-134 diesel

engines during the mid-1950s (in order to increase speed and fuel economy) remained in use until 1971. Some 295 units were shipped directly from the factory to the Soviet Union under the Lend-Lease program, and additional vehicles ultimately were utilized by other nations. ■



References - DIAMOND T



▲ Close-up of the rack and pinion ratchet, used for raising and lowering the spare wheels from beneath the trailer.

▼ Detail shot of the jaw clutch lever and drag brake lever. The small red lever is the clutch control valve.



▲ Hinge and link detail of the trailer tow ramps. Note the rough cut at the end of the hinge pin.

▼ Winch cable guide rollers mounted in the front bumper.





▲ This vehicle is not fitted with a bumper mounted headlight on the right hand side.

▼ Winch cable roller and towing pintle detail at the rear of the tractor unit.



▲ Here we can see the red painted airline coupling. Note the bonding strip between the fender and lower corner of the radiator surround.

▼ Gar Wood 40,000 lb winch drum. The red lever is the winch throttle control.



▲ Airline coupling on the front right hand fender, the one on the left fender is painted red.

▼ Close-up of the tow ramp mounting bracket and tie-down ring.



▲ Tow ramp detail shot showing their hollow construction.

▼ A heavy duty draw bar is required for a trailer with a 45 ton capacity.





Book Reviews



EBEN-EMAEL

IAN KEMP

IAN ALLAN PUBLISHING

ISBN 0-7110-3092-8

This is the second in Ian Allan Publishing's Secret Operations series and covers the classic German airborne assault on the Belgian Fort Eben-Emael on 10 May 1940. The action is covered in 96 pages with over 90 monochrome photos, 13 in colour (current views) and 8 maps/diagrams. The photos are clear, well chosen and complement the text effectively. The book is split into six chapters – Fall Gelb (Case Yellow – the German invasion of Belgium, Holland and France), Fort Eben-Emael, Fallschirmjäger, Planning and Preparation, 10 May Glider Assault and Conclusion.

This is an interesting and informative read and will allow the enthusiast to compare the German glider-borne assault on the fort and the two bridges over the Albert Canal with the British assault of the bridges over the Orne canal (Pegasus Bridge) and river. My only minor criticisms are the lack of contemporary photos of the action and its immediate aftermath (perhaps not surprising!) and the minimal coverage of the personnel involved.

All in all, not a bad read and worth adding to the library.

Paul Egerton



MODEL HORS-SERIE TSAHAL 1/HEAVY ARMOUR

This is the first special issue from the team who produce the popular French publication, Model Magazine.

I'm sure this title will be very popular with IDF armour fans, the book consists of 100 pages all packed with well built and painted models, most of the models are complimented by a good selection of walk around detail shots of the real thing.

The models featured include several different marks of the Merkava, M60 Megach 7A and 7C, M109 Doher, along with the T55 based APC the Achzarit and Puma engineers vehicle based on the centurion hull. To round off the models there is the odd looking M113 Nag Man and the cool looking Namer Merkava recovery vehicle. All the vehicles represented are ones that are currently still in service, hopefully there will be a second volume that will cover some of the earlier vehicles including centurions and the original M60's fitted with first generation Blazer reactive armour. If you are modelling on a budget these models may seem a bit extravagant as they are largely based around comprehensive resin conversions.

A must for all who have an interest in the amazing selection of armor in the Israeli Defence Force inventory.

Available from www.historex-agents.co.uk

The Editor



SPECIAL FORCES WAR AGAINST SADDAM HUSSEIN

ERIC MICHELETTI

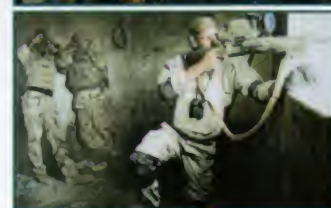
HISTOIRE AND COLLECTIONS

ISBN 2-915239-64-9

H&C have established an enviable reputation for high quality books containing outstanding photography, detailed and informative text and all at an affordable price and this offering is no exception. It is crammed full of contemporary colour photos supplemented by photos of re-enactors illustrating the various items of equipment and uniforms. The text is concise but gives a comprehensive overview of SF involvement in Iraq during OIF. For the modeller of modern military subjects, the photos provide a wealth of detail on uniforms, camouflage, personal weapons and equipment and the heavier support equipment (HMMVs, helos etc).

A stunning book for those interested in modern military conflict – buy it. You will not be disappointed with any H&C publication.

Paul Egerton





Book Reviews



THE IS TANKS

MIKHAIL BARYATINSKIY
IAN ALLAN PUBLISHING
ISBN 0-7110-3162-2

This is the first book in a new series on Russian Armour by Ian Allan Publishing and follows their Tanks in Detail series format; although to my mind, this new series seems to provide a more comprehensive package.

In this instance, the IS tanks (IS-1, IS-2 and IS-3) are covered in 96 pages with over 100 black and white photos, 15 colour shots, 10 colour profiles, 20 schematic drawings and 2 sets of 1/48 plans (you do get a lot for your money!). The photos are sharp and well chosen to illustrate the various aspects of the vehicle and the schematics provide that level of extra detail so sought after by the serious modeller. The choice of vehicle for the first subject is a good one in that the tank and its derivatives saw service from the early forties to the early seventies in a variety of Nations' armoured formations including Israel (captured Egyptian vehicles!).

This is an excellent publication and is well worth adding to any armour library. I look forward to the follow on volumes in the series.

Paul Egerton



**U.S. TANK DESTROYERS
IN ACTION. ARMOUR NUMBER 36
SQUADRON/SIGNAL PUBLICATIONS
JIM MESKO
ISBN 0-89747-385-X**

If you haven't come across one of Squadron/Signal publications then this is an excellent example of what is on offer from this publishing house. Presented in a landscape format with black and white photographs and high standard drawings the 50 page soft back book has the added bonus of colour illustrations of the range of subject's as the centre spread, it's a winning formula. This book dose what it say's, it gives you a view into the development of the tank busters needed to combat the wide range German field armour. You have to say the men sat in the back of a BEEP with a peashooter in North Africa must have been brave or mad or a bit of both to take on the Africa Korps, the lessons learned in North Africa were taken onboard quickly. As you move though the pages, battlefield pictures show you how the Americans took on the enemy using M10's, M18's and M36's, these pictures not only provide a glimpse of the tanks in action in Europe and the Far East but give excellent modelling subjects.

If you haven't already picked this up first time round it has now been re-released and for Allied Armour buffs this is a must, Squadron/Signal have a walk round on this subject which is a great in depth accompaniment to the in action book.

Ian McGonagle.



VILLERS BOCAGE THE TRUTH BEHIND THE MYTH

DVD PAL 50 MIN RUNNING TIME
DANIEL TAYLOR
A RAVEMEDIA PRODUCTION

This 50-minute production will be a must for all interested in this fascinating and controversial incident during the Normandy campaign of WWII. Military historian Daniel Taylor introduces and narrates this 50-minute documentary on the true story behind this infamous incident where German tank ace Michael Wittmann reportedly knocked out a whole regiment of British tanks from the 7th Armoured Division, the famous Desert Rats.

With the aid of eyewitness accounts, computer graphics, maps and archive photos help clarify what actually happened in this small

Normandy village on the 13th of June 1944.

Well worth a watch, with the added bonus that a large proportion of profits go to the charitable work of the Association for the benefit of veterans.

Price is £20 + £3 p&p.
Write to the Sharpshooters Yeomanry Association, c/o 21 Red Cedars Road, Orpington, Kent, BR6 0BX.

Available from
villers@sharpshooters.org.uk
The Editor



Letters

RECOMMENDED READING

ACHTUNG PANZER NO.6

ISBN 4-499-22706-2

PANZER KAMPFWAGEN TIGER

Following my recent holiday to Normandy, and the release of the Tamiya 1:48 early Tiger I, I've rekindled my interest in all things German and especially the Tiger I. For pure modelling reference I can think of none better than this book, packed full of superbly accurate line drawings and sketches showing every detail change incorporated during the production run of each variant. The book covers all the vehicles in the Tiger family, from the early experimental vehicles right up to the ponderous Hunting Tiger.

The book also contains an excellent selection of both colour and black and white photos,

This really is a great book designed to be a one-stop reference source for fans of this iconic tank.

Available in the UK from
Accurate Armour
www.accurate-armour.com



CHEAP CHISELS

I was recently looking at the new Mission Models Micro-chisels in your sister magazine, and was considering buying some when I had the money.

Unlike the Editor in last months "Last Post" I do find the hobby increasingly expensive.

It's not the price of any one item, but the number of aftermarket sets and tools, paints/pigments and all the other paraphernalia you need now to get a show class model.

When put together it can all add up to a hefty bill, so I look for the cheaper alternatives, and like to experiment.

So while thinking about micro-chisels I looked for an alternative, and found a cheap set of jeweller's screwdrivers, £1.99 from a local shop, and ground an edge on to each with my motor tool and a grinding bit.

I ended up with three varying size chisels for a fraction of the price of the proper item, and if they go blunt I just sharpen with a sharpening stone instead of buying new heads.

I suppose what I'm saying is that the hobby can be expensive but it can be made cheaper by a little sneaky ingenuity.

All the best and keep up the good work with the magazine.

Glyn

P.S. Try Tipex or other correction fluid for a good small gap filler and cast turret textures.

CAN WE SEE SOME MORE...

It is not often I write to model publications but I must congratulate you on the quality of your new magazine, Model Military International. I have really been enjoying the magazine. I liked your sister publication TMMI but the latest addition to the ADH stable is of excellent facture and is dedicated in its entirety to my favourite areas of the hobby.

The presentation is visually interesting and stylish with concise and informative articles. The photography and models are all stunning and certainly inspirational for me despite years in the hobby. The balance of content is spot-on, in my opinion, with a good mix of subjects.

The news and reviews are very interesting and at a "golden" time when the hobby is spoilt with such a wealth of choice and accessories, your reviews offer an insight into what more stuff I could buy if only I had the time to build it all and ever more funds!

A thought occurred to me as I experimented with the latest generation of pigments (MIG Modelling Pigments) on my latest project, a Sherman HVSS. They are certainly realistic but could you do a step-by-step tech article on the different approaches and effects with accompanying photography? Using them wet, dry, mixed with gel etc. and how that can illustrate dust, wet mud & dry mud. In all my reading of magazines, I'm not entirely sure that I have seen an article exploring this.

On another matter, sometimes I use brass and resin after-market items and sometimes I build out of the box with scratch-built components. I often reflect that you could spend a fortune on a kit (and sometimes do) if you got a load of accessories or, alternatively one could just use lead foil and plastic to upgrade a standard kit. I personally do not object to either approach.

However, I would be interested to see just how much one could spend on say, a Sherman M4A3 76 with a Italeri kit out of the box with home-made upgrades compared to a fully accessorized version with no expense spared. I reckon if you added all the costs, especially including the outlay for each tool or paint used, you'd be heading to a hundred quid.

It would then be interesting as an experiment to compare the finished models and I bet it would

show an interesting point about the current "cost of the hobby" debate...namely that whatever you spend on the kit, the real skill and challenge of our hobby resides in making an inanimate scale model come to life with a judicious, artistic and realistic scale paint finish and weathering job. No amount of expense on after-market items is worth it if the final paint and finish isn't up to scratch. By the same token, a well-finished out-of-the-box model can be just as inspirational and impressive. A comparative study would no doubt inspire a stream of contrasting correspondence by proponents of both schools but I bet you that the photos would do the talking...

Some ideas there you can choose to include or not in your excellent new publication, but I congratulate you, your production staff and the modelling contributors on the debut of this fine magazine. I have long awaited something with similar production values- you have answered the call with MMI.

**Best wishes,
Martin Hughes**

Ed Says: I completely agree with you Martin, that a well built and painted out of the box model will certainly look better than one with every extra and a poor finish. Regards the tech guides for pigments, we have one in the pipeline.

INSPIRED TO HAVE A GO

Firstly I would like to say congrats on such a good and informative magazine, which brings me to the reason I am writing to you, I have been building kits for some 20 years now but up until I read your magazine I have been building them mostly straight out of the box. Having read your article "Winston's Wonder" I decided to have a go at building Tamiya's Churchill Mk VII and with the aid of Mig's pigments and your mags tips on weathering, pin washes etc. I think I did quite a good job, so now my next project will be to build a diorama to go with it.

Once again keep up the great work and thanks

Shaun Stratton

WHO'S DOING THE HOBBY DAMAGE?

Well, I have to say that I recently attended the Torbay annual pilgrimage through the bank holiday weekend traffic to attend a truly superb local show! Whilst at the event I made a mental note of the amount of youngsters who were there! With the attendance of a reasonable contingent from a local

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school there were in fact lots of little hands actually modelling and enjoying the event. This is after all the future of the hobby! We as grown adults should be encouraging those with eager enthusiasm to have a go and appreciate their efforts, some of which are truly outstanding and would put several adult modellers to shame.

With this little glimmer of hope for the hobby, I was horrified to come home and look on the internet and read some of the dribble that some of the so called experts are going on about. I am referring to the type of forum where said so-called experts get a thrill in being the first to slag off a new kit.

This is becoming a daily ritual where a new model is revealed to the world by companies who have invested several thousand pounds, Euro, Dollar or Yen into the production of the model that every one has been screaming for over the past ten years! (You know the sort of thing that has been top of the annual polls and no one thought would ever be produced?) The next thing, via the web, one of these self proclaimed experts finds a bolt 3 mm to the left of where it should be in their opinion! Result is that there is a thread going on about this for several days slugging the company for making a so called error. Through reading some of these threads I have noticed that these people are quite often the same individuals time and time again (often using pseudonyms afraid of showing their true identity). It seems that they are after some sort of kudos for being the first to spot an alleged mistake. These individuals seem to be full of their own self importance and perhaps they don't know the real damage they are doing.

I know of at least one company who produced a conversion for a kit, and the first person who wrote about it on the web destroyed any chances to continue production as sales dried up. I have the conver-

sion and know that: 1. It is the only ball game in town. 2 It was made from official plans. 3 The patterns were remade several times to get it right 4. I know this as I made the patterns. (The company in question had a policy that if you were not happy, then a full refund would be made - this was offered to the critic but to date he has not returned the conversion). The net result of the slugging he gave was that the company now ceases to exist!

This whole theme is not just present in military forums, it happens in aircraft figures etc too.

Additionally, and most annoyingly, they are often wrong too. I was recently shown a picture of a US special forces soldier figure which was systematically slagged off on a web forum as being inaccurate. The editor has kindly added a photo he found of one of those soldiers which clearly shows the type of clothing and weapons used are identical to the figure! (Issue 3)

Finally I have recently seen these people ranting about a model that was on show at a hobby fair (Test shot only) being a copy of someone else's kit. This is by individuals who have never seen the kit themselves, just blurry photos on the web. This is before the model has even gone into production!



MESSAGE FROM THE EDITOR

Well with our summer coming to an end (at least in the northern hemisphere) and the nights drawing in, I guess modelling for many will start again in earnest. I for one tend to get too distracted while the weather is good and the evenings are light, for some reason dark evenings are when it feels right for me to get gluing. Well it's got to be better than endless reality TV or Eastenders!

APOLOGY

Unfortunately, due to unforeseen circumstances we didn't have the space to include the Sd.Kfz 232 6 Rad by Fraser Gray. Basically, if we had put it in this issue, we could not have given it the space it deserves, therefore we have postponed it until issue 7. We apologise for this change from our original plan, but we really think this excellent article shouldn't be edited down to make it fit in this issue.

See you again on October 5th

Spud

John "Spud" Murphy

My whole point here is to say that if you are one of these so-called experts, then shut up, as you are doing the hobby more damage than good! If you are so good then why not write for one of the many magazines out there (or are you afraid the editor will edit your comments, knowing they are wrong and you are afraid of no KUDOS!) Alternatively if you can do better, then do it yourself!

Back to the kids at the show; I saw them doing great work with little or no regards to if the kit was

accurate, and enjoying the experience of building the model. What are we to expect once they start to use the web, and read that every model is so inaccurate? Will this ultimately put them off?

John "Tigger" Wilkes

Ed Says: Thanks John, no sitting on the fence there then! It does make you wonder if some of the people you describe won't be happy until they kill off our hobby, then wonder what happened.

JUST GOTTA BUILD IT!



WE TAKE A CLASSIC PHOTOGRAPH THAT'S JUST CRYING OUT TO BE TURNED INTO A MINIATURE SCENE...

This is a great shot taken in Cherbourg, showing the ubiquitous 2.5 ton GMC heading a small convoy along a cobbled street, complete with tram lines and their associated overhead power supply. My favourite element is the captured Kettenrad now in US Army service with the MP's. It looks like the Kettenrad has received a complete repaint in olive drab and some neatly applied markings. Even if the whole scene isn't inspirational there is always some detail we can use or incorporate in our next diorama to help it look that little bit more authentic.



Figures

- A round-up of the latest figured sets on release...



Dragon
1:35 Urban Elite Series
BRITISH S.A.S
Item No.6501

A welcome re-release from Dragon, this set of SAS troopers in their famous black kit; show their age compared to the latest sets coming from Dragon. The fit between the legs and torsos isn't the greatest; some serious filing was in order to get a flush join. Overall they are a nice usable set of figures, and with some imagination could be the centrepiece of an action packed vignette or diorama.

The highlights for me are the MP-5s and SPAS shotgun, which are very nice indeed, as are the way the anti, flash hoods and S10 respirators look very good.

If you like figure modelling but hate painting faces this could be the perfect set!

7.5/10



Italeri
1:72 AMERICAN SPECIAL FORCES VIETNAM WAR
Item No. 6078

This set actually consists of both Special Forces figures and standard infantry figures, the moulding is pretty good and will be perfect for the wargamer. I particularly liked the guy kneeling with the M60 machine gun; he is a real John Rambo!

A great selection of figures in decent poses.

8.5/10



Verlinden
1:35 NAVY SEALS
AFGHANISTAN
Item No.2312

Verlinden hasn't forgotten the fans of modern subjects with this pair of US Navy SEALs as seen during the defeat of the Taliban in 2001/2002. Both are typically un military looking, which was the norm for Spec Ops guys operating there. One is armed with an M16/203 and the other is armed with what looks like an M4 carbine.

I'm sure these will be another welcome set, with lots of diorama potential.

9/10



Verlinden
1:35 BRITISH INFANTRY
Item No.2297

Another couple of much appreciated WWII Allied figures from the team that never seem to stop. Both figures are in poses that will fit in to many a scene where they are in the thick of the action. Both are in standard battle dress, and armed with Lee Enfield rifles, one is wearing the popular leather jerkin over his battle dress.

8.5/10





Takahashi Modelling
1:48 GERMAN SS S.PZABT101 SS
HAUPTSTURMFÜHRER. NORMANDY 1944
Item No.TK4801

This is the first 1:48 scale figure we have seen from Takahashi, the standard of sculpting and casting is superb. I think this will be the perfect figure to be sat on the mantlet of your late Tiger I, the likeness to Wittmann and this classic pose have been captured perfectly.

10/10



Warriors
1:35 FRENCH TANK CREW WWII
Item No.WA35604

These two figures have been beautifully sculpted by Bill Chilstrom, specifically for the New Tamiya Char bis. Both look typically French wearing the characteristic helmets and leather jackets. The figure in the turret comes complete with a new hatch to ensure he sits correctly.

9/10



Takahashi Modelling
1:48 GERMAN SS S.PZABT503
HAUPTFELDWEBEL RUSSIA 1943
Item No.TK4804

Another very good figure taken from a well known photo, again this figure like the Wittmann figure, is designed to go with a Tiger I, this time an early variant. Due to the small size of these figures it will really be a test of ones painting skills.

10/10

Royal Models
1:35 PANZERWERFER 42 CREW (RUSSIA 1943)
Item No. 451

Royal Models may not release as many figures as some of the other manufacturers, but when they do they are second to none. This set consists of three crew figures in the act of reloading the launcher; all are dressed in winter clothing. The sculpting is first class and the poses are realistic and natural. This is another of those sets that makes you want to build the model just to use them.

10/10



Italeri
1:72 VIETNAMESE
ARMY/VIETCONG
Item No. 6079

To complement the US set Italeri has thoughtfully produced a set of NVA/Vietcong figures, these are predominantly in charging poses. These will be perfect for attacking that firebase the Americans are defending.

Again these are great value and with 50 figures per set building up that army won't take long.

8.5/10





“WASHED OUT TI

Les Smith describes a quick and easy white-washing technique!

Well, I must admit that I've always liked the winter white-wash schemes on military vehicles, and dare I say it, some aircraft too! And of late, I have admired many fine examples on the internet through my favourite modelling sites, but I have at times been put off this finish due to the fact that sometimes their application is at times difficult to apply. This is due mainly to our insatiable appetite for after market additions in the form of photo etch, and also fine resin detail sets. We all know of the masking techniques using Maskol and other latex based products, and also the older technique of reverse painting where the model is painted white first then our base colour applied in the form of dry brushing and/or chips applied with a fine brush. To be honest, in the past I have used this method myself, for in it's day it was an easy and practical option, and maybe still is. Over

the last few years I've painted my models in the same way as most modellers do now, primer coat or undercoat, followed by a base coat and then any camouflage or winter scheme. This is also very important due to the aforementioned after market brass and resin that we add. So it is this that brought me to the problem of adding a realistic winter white-wash to the vehicles that I build with a quicker and more importantly, less destructive technique. I was pondering this problem over a period of time while at work (where else!) and I kept thinking of the Maskol technique, thinking "surely there's an easier option?". While thinking on this line, I noticed that I was staring at a part of the machine I was working on, looking directly at some minute chipped and flaked paint, which looked for all money exactly what I needed to replicate. This had me thinking more, and then "Eureka" - I thought I had the answer. After a quick dash to the workshop to

see if we had any grease, which thankfully we did, a further hunt found some fine sponge and within minutes I was applying a mask of grease onto the machine's surface trying to reproduce a fine copy of the chipping. This was interspersed with a cursory glance or two in the direction of my work colleagues should they wonder what was capturing my attention. Then, with some "borrowed" grease, and a piece of sponge I found myself later that evening in my model room I tried this technique on a scrap of plastic card which I had spray painted grey. After painting the top coat over the grease mask with an acrylic paint, I then went to the next stage of my idea. This was a bathroom basin filled with hot (not boiling) soapy water, after immersing the painted card in the water I then gently attempted to brush off the grease and the layer of paint on it. This is where the first and only failure appeared - the grease would not come off with the hot water

and I don't suppose it really would, as it is not designed to dissolve readily! Undeterred, I went back to the drawing board, as I knew now that all I needed was to substitute grease for something that would firstly dissolve, and secondly leave no oily residue. As it turned out, our pantry cupboard held the answer - here in all its glory sat a jar of not only Marmite but also Vegemite! Two products used in the flavouring of stews and casseroles, as well as a popular sandwich spread... well, at least here in New Zealand and also in Australia. These two products dissolve easily in hot water and don't have an oily residue, although I must admit the thought of using this product in modelling seemed quite comical, but the end would certainly justify the means! After a quick re-spray of my test card and the application of the 'marmite technique', plus subsequent top coat, it was back to the bathroom (which incidentally was getting to be a bit of a mess),

GER"



Once toned down and weathered this simple effect looks totally convincing.



The technique the author used for the whitewash on his tiger has also worked perfectly for the flaked and weathered sand finish on this T-55.

Tech Tip!

Polish the base coat on large areas with a soft cloth, this helps give a powdery finish to the applied white-wash, then seal when dry.



STEP-BY-STEP GUIDE



1. This is how the effect looks after the Marmite has been applied to a base coat of dark grey, then given a topcoat of Tamiya matt white.



2. a torn piece of sponge has been used to demonstrate the technique on a scrap piece of card.



3. Here the second colour is being applied by airbrush, this should be an acrylic based paint.



4. With some gentle scrubbing with hot soapy water the Marmite dissolves completely taking with it the topcoat, leaving you with a nice flaked paint finish.



5. With the simplest and cheapest of materials a very realistic finish can be achieved in very little time and with only a bit of practice.

anyway, with a careful scrub with a soft toothbrush (mental note to buy new toothbrush!) I had a successful trial - brilliant! This was followed by subsequent testing and experimentation over a period of time. I have now used this technique on several models with very good results, and I'm sure some top modellers can enhance this quick technique even more.

THE TECHNIQUE

I will attempt to describe the "marmite technique" in a more precise manner with the aid of some pictures to show the stages of the technique. Well, firstly I would say that this technique is very easy and also very quick, for instance the Tiger I turret pictured here (Fig. 1) before weathering, was base painted dark grey, the 'marmite' technique added, then over sprayed with Tamiya White XF-2 and finally washed in hot water (with pictures taken), in less

than forty minutes. But I would advise perhaps that one should practice first on card or an old model. You will find that the more you use or practice this technique the easier it becomes, with great results. Okay, firstly assuming you have the marmite or a similar product, we apply the marmite with the aid of a fine piece of sponge (use a ripped edge) onto our test card, painted light grey for the purpose of allowing a clearer picture here (Fig. 2). Practicing with different sized amounts of the product, I have found applying small sized beads of marmite followed by more random larger beads works well, playing around with different patterns helps get a grasp of the technique and also for different applications. Once you are happy with the application of the marmite, it is then time to spray your top coat, which should be an acrylic paint (Fig. 3), I use Tamiya paints almost exclusively.

After you've sprayed the top coat, leave the model or test card for a few minutes or so to dry while you prepare the hot soapy water. Immerse in the water, and then taking an old soft brush (be it a toothbrush or a flat modelling paint brush), brush off the marmite and as it dissolves away, the top coat of paint on the marmite washes off (Fig. 4) leaving your flaked paint scheme. While the paint is still soft, handle with care - you will notice slight raised edges to the paint just like the real thing (Fig. 5). Shown here are completed test cards showing the different applications from winter white-wash, to one of my favourites - an old rusted paint finish, ideal for that derelict piece of military hardware. To finish the technique, we add scratches and scuffs randomly to our finished coat before it dries thoroughly - this adds a natural look to the finish, all of which have had a quick oil wash to highlight.

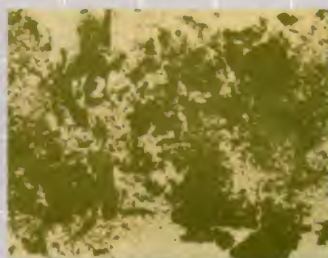
IN CONCLUSION

Shown here is the repainted Tiger I which I have recently finished, apart from one or two small details to add. You will notice the white-wash has been well weathered on the lower structure with a gradual lessening of the weathering further up on the vehicle. This is in stark contrast to the un-weathered turret as shown above. Some mud in the form of pigments is to be added to the tracks after its placement on a small winter diorama with figures at a later date for an up coming competition. So to finish... Some points to look at are: your base coat can be either enamel or acrylic, but your top coat should be acrylic - this also has the added benefit of allowing the usual quick turn-around in applying washes etc. The addition of scratches and scuffs should be added while the paint is still soft. Mask off all decals/markings prior to applying the 'Marmite'

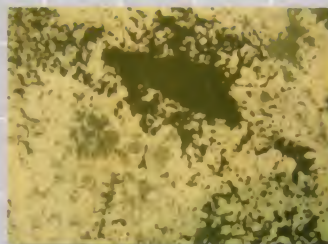
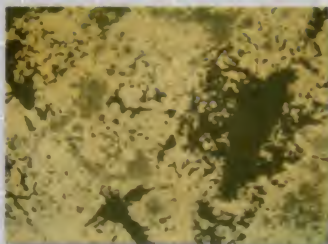
EXAMPLES OF DIFFERENT FINISHES



The author has included samples of how this effect can be used using various base colours. Not only can it be used to simulate a flaking whitewash, but will work just as well for sand camouflaged vehicles, where the factory applied base green is showing through. This is something very common to Soviet manufactured vehicles used in both Gulf wars.



Here we can see that this effect will work just as well when painting items of equipment or buildings on dioramas where the base coat could be a rust colour. This type of effect is frequently used by master modeller Phil Stutclinks on his stunning dioramas and models.



Tech Tip!

Add a little brown or earth colour to the white to "age" the colour.

Modelspec

Tamiya Tiger I Early, Kit No.35216, repainted.

Materials

Injection moulded grey coloured styrene,
Link and length and one-piece vinyl tracks,
waterslide decals, and a set of colour profiles.
Marmite or Vegemite.

Paints & pigments used

Mig Productions Weathering Pigments
Europe Dust P028
Russian Earth P034
Dark Mud P033
Winsor & Newton oil paints - your usual weathering colours.
Tamiya Acrylic matt paints.

References

Tigers In Combat Vol.1 by Wolfgang Schneider.
Tigers In Combat Vol.2 by Wolfgang Schneider.
Achtung Panzer Vol.6 Pz.Kpfw Tiger.

Rating N/A

technique. A matt or gloss varnish can also be applied to seal the white-wash/paint finish to aid in the protection of the scheme prior to applying your favourite weathering mediums. So, why not give this simple technique a go - you'll enjoy it, as it is very simple, and I'm sure the results will impress. ■

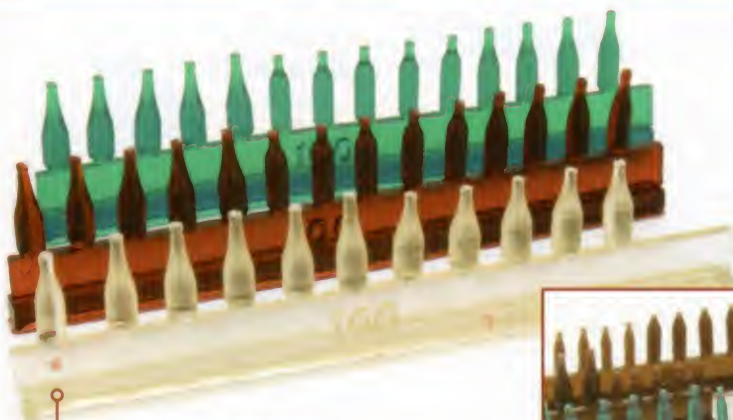


Compare these two photos with the turret photo with just the bare coat of white, the weathering really tones the effect down.





Incoming



ACCURATE ARMOUR

1:35 WINE BOTTLES AND DECALS

RED - ITEM NO. A100R

WHITE - ITEM NO. A100C

GREEN - ITEM NO. A100G

I'm sure these bottles will be appearing in many a diorama near you at any time soon. They are well cast with some very nicely printed labels on the supplied decal sheet, definitely worth getting some for the spares box.

Available from www.accurate-armour.com

9/10 The Editor



1:35 BEER BOTTLES AND DECALS

GREEN - ITEM NO. A099G

BROWN - ITEM NO. A099B



MIG PRODUCTIONS

1:72 HUMVEE WHEELS (AGGRESSIVE PATTERN)

ITEM NO.72-089

Mig Productions have produced a set of late pattern aggressive tread wheels as an alternative to the tyres supplied in the Dragon kit of the ubiquitous Humvee.

What you get is a full set of wheels including two spares, the mould blocks are clearly marked which ones are for the front and rear as there is subtle hub differences between them. I particularly liked how well the tread pattern had been replicated on such small wheels.

Available from www.creativemodels.co.uk

9/10 The Editor



DRAGON

1:72 SDKFZ 181 TIGER I AUSF E LATE

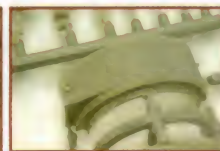
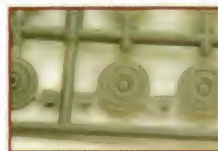
PRODUCTION WITH ZIMMERIT

ITEM NO. 7203

Dragon broke new ground when they released this kit as it was the first kit with an injection moulded Zimmerit finish. This kit consists of 95 parts, 2 etched brass exhaust covers, a piece of braided wire for tow cables and a set of vinyl tracks. As this is an early Dragon release the instructions are of the photographic type of which I am not a fan as some photographs show the assembled item, which can be confusing. That said this is a simple little kit which goes together with the minimum of fuss and the Zimmerit finish is very well done. The kit come with only 2 markings options both from the Normandy front and are both attractive 3 colour schemes. Overall a nice kit although some modellers may not like the vinyl tracks but no doubt Dragon will re-release this kit with the excellent DS100 tracks at some stage.

Available from all good model shops.

7/10 Jeff Adams



IMA (INTERNATIONAL MODELS ASIA)

1:35 AVENGER A30

IMA are a relatively new company but have quickly produced a large range of complete vehicles and conversions, mainly plugging the large gaps in British and Commonwealth vehicle lists. This is one of their full kits comprising mainly of moulded resin but with a 3 piece metal barrel, laser cut plastic turret basket, plastic strip and brass wire. The light grey resin is cleanly moulded with no visible air bubbles and the couple of pieces I test fitted went together snugly.

The instructions consist of line drawings with accompanying text so care will have to be taken in placing all the parts so you will have to be careful in placing the parts.

There is no painting guide or decals so references should be consulted. The Avenger is an important kit in the story of the British cruiser tank series. Together with Broncos Comet and IMAs soon to be released Challenger the before mentioned gaps are finally beginning to close.

Available from www.friendshipmodels.co.uk

8/10 Graeme Carruthers



ACCURATE ARMOUR

1:35 TRAFFIC CONES

LARGE A097

SMALL A096

A great idea from Accurate Armour are these two sets of traffic cones, they are such a familiar object in modern day life. 15 cones are included in the large set, this set also come complete with the flashing warning lamps often seen on the ones used on our motorways. 20 cones are included in the smaller sized set. Available from www.accurate-armour.com

9/10 The Editor

RUSSIAN T-34/76 TANK

(MODEL 1942 FACTORY NO.112)

HOBBY BOSS

1:48 RUSSIAN T34/76 (MODEL 1942 FACTORY 112) TANK ITEM NO. 84806

This is the second product from Hobby Boss that I have reviewed and all the superlatives used for the Sherman apply and so on!

Over 380 pieces go to make up the kit with link and length track in this instance. Additionally, there are two clear spotlight lenses, a braided copper towing cable and an ingenious combined etch and plastic grill for the engine deck. The moulding is sharp, flash free and the level of detail outstanding. Another clever touch is the provision of plastic formers around which to assemble the track before adding to the drive sprocket and idler wheel areas. Included in the kit is a full interior and I mean full – engine, transmission, cooling system, fighting compartment etc reminiscent of the Trumpeter 1:16 scale kit of a similar vehicle. Once again, my only minor criticism concerns the markings. A colour sheet illustrates one vehicle but there appears to be significantly more on the decal sheet but a little research should sort out what is what.

All in all, a fabulous kit, even better than the Sherman and it makes you wonder if there are any limits to what these manufacturers can achieve. Buy one – buy several! Available from www.creativemodels.co.uk

9.5/10 Paul Egerton



PLUS MODEL

1:48 FUEL-STOCK EQUIPMENT GERMAN WWII ITEM NO.4022

Doing what they do best, plus model have produced an excellent set of fuel containers for the rapidly expanding range of 1:48 armour. All parts are flawlessly cast and only require minimal clean up. The set includes a good selection of various cans as well as a small decal sheet with all the appropriate labels. I think this is a great idea; top marks Available from www.creativemodels.co.uk

9.5/10 The Editor



Coming Soon...

NEW

Etched detail sets from Aber

1:48

48004 Stug III Ausf.B (Sd. Kfz.142) to fit Tamiya
48005 Fenders for Stug III and Pz III Ausf. L
48006 Hetzer Jagdpanzer 38 T to fit Tamiya
48007 Fenders for Tamiya Hetzer

1:35 Grille sets

G12 Grilles for Sd.Kfz 182 King Tiger (Porsche Turret) for dragon kit.
G18 Grilles for Sd.Kfz. 181 Tiger I to fit Dragon kit.

1:35 Stowage bins

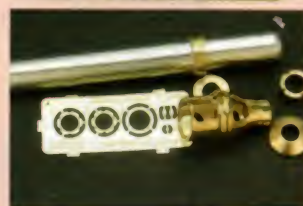
35 A102 Turret stowage bin for Tiger I standard model, to fit all Tiger I models.
35 A104 Turret stowage bin for Pz III, to fit all Panzer III kits.
35 A105 Turret stowage bin for Pz IV, to fit all Panzer IV kits.
35 A106 Turret side stowage bins for Tiger I, initial production model.

1:35 Gun barrels

35L-13 German 88mm kwK 43/2 L/71 Tiger B Porsche-Turm, early barrel.

1:35 Detail sets

35175 Sd.Kfz. 181 Pz.Kpfw. VI (P) Vol 1-basic set to fit Dragon kit.
35176 Sd.Kfz. 181 Pz.Kpfw. VI (P) Vol 2- additional set (fender), to fit Dragon kit.
35185 Panzer IV Ausf. D Vol 1-basic set, to fit Tristar kit.
35186 Panzer IV Ausf. D Vol 2-additional set (fender), to fit Tristar kit.
35189 Panzer IV Ausf. C Vol -2 additional set (fenders), to fit Tristar kit.



Stainless steel towing cables

TCS 06 .6mm diameter, 1mtr long.
TCS 13 1.3mm diameter, 1mtr long.



Incoming



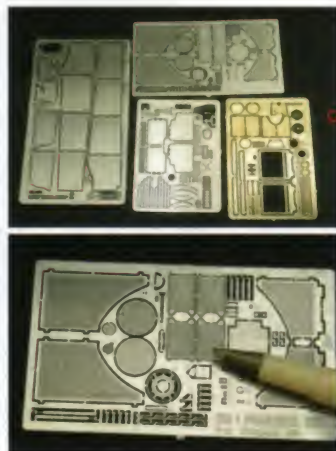
DRAGON

1:72 T34/76 MOD 1942 GERMAN ARMY
ITEM NO. 7268

Yet another Dragon Re-release but a very interesting one never the less. The Germans were quiet adapt at using captured types into their service and the T34 was no exception. The kit consists of 140 parts, 33 etched Brass parts, braided wire for tow cables and the de rigueur DS100 Tracks. This kit also comes with quite a few spare parts including stowage boxes, spare track links, and 3 different types of road wheels, which have already been removed from the sprue, thus saving the modeller time. This kit also includes the modifications that were made to their captured tanks, these include new stowage boxes, a cupola taken from a Panzer III/IV, notek light and side skirts. The Germans often repaired these captured tanks with whatever road wheels they had at their disposal hence the modeller is supplied with 3 different types, so please consult your references. This kit comes with 4 marking options, 3 from 1943 all repainted examples and one from 1945 left in overall green with no markings. Highlights of this kit include the etched brass side skirts and engine grills, also the exhaust pipes are particularly well done using slide mould technology. Overall a great little kit which I thoroughly recommend.

Available from all good model shops.

9/10 Jeff Adams



ROYAL MODELS

1:72 ETCHED BRASS SET FOR DRAGON
PORCHE/HENSCHEL KING TIGER
ITEM NO.422

This set is absolutely stunning, all be it one for the more experienced modeller, due to the microscopic size of many of the parts on the frets. This set will certainly keep the more experienced small scale builder happy for a while, this is one of those times when you wonder what can model manufacturers produce to top this?

Available from www.sbmodels.net

7.5/10 due to the skill required. The Editor



LEGEND PRODUCTIONS

1:35 M48A2GA2 CONVERSION

ITEM NO. LF1127

This third conversion for the M48 is another popular version that hasn't seen the light of day as a model before. The A2GA2 was a German variant of the tank with the alterations taking place to the turret, the main gun was replaced with a Rheinmetall 105mm, the commanders cupola was replaced with a German cupola fitted with the MG3 which is a modern variant on the classic WW2 MG42.

The kit is similar to Legends M48A2 kit with a new turret and its fittings being the main change. The castings in cream resin are, in my example, flawless. There is no warping on the large upper hull and I couldn't find any air bubbles anywhere. The instructions are in the familiar labelled colour photos and should pose no problems. There are no painting instructions and you will have to source your own decals.

www.friendshipmodels.co.uk

9/10 Graeme Carruthers



ACCURATE ARMOUR

1:35SOFT DRINK TIN AND DECALS
ITEM NO.A102

These tiny little resin drinks cans come complete with a small waterslide decal sheet, these will just need wrapping around each can and the ends painted in a suitable aluminium colour for perfect scale soft drinks cans.

Available from www.accurate-armour.com

9/10 The Editor

ARMoured BRIGADE MODELS

1:35 LATE PRODUCTION HIGH BUSTLE 17-PDR FIREFLY TURRET ITEM NO. ABM-008

It's good to see Armoured Brigade, they were setting the standard with Sherman detail set and conversions, before things seemed to go quiet and Formations came on the scene.

I'm glad to say the quality is as good as ever, the casting is first rate and the detail is excellent. This particular Firefly features the standard late pattern oval loaders hatch, as opposed to the more familiar square hatch most associated with Fireflies. The set is designed specifically for the Dragon Sherman Ic (Hybrid), according to the instructions this style of turret was common to composite hulled Fireflies equipping Canadian units.

I can feel another Sherman build coming on.

Available from www.friendshipmodels.co.uk

8/10 The Editor



S M4 TANK Mid- Production



HOBBY BOSS

1:48 US M4 TANK MID PRODUCTION ITEM NO. 84802

I can't say that I had heard of Hobby Boss but I understand that they are associated with Trumpeter and what an excellent introduction to their products this is. Over 260 plastic parts (including the hull tub) make up the kit together with a small photo etch fret containing brush guards in the main and a pair of 'rubber band' tracks which are really very good. Decals and a colour illustration for two vehicles are provided but I think that the markings may benefit from a little further research. Interestingly, two types of road wheel, suspension units, drive sprockets and gun mantlets are provided perhaps indicating other variants in the pipeline. The standard of moulding is very high and the detail work particularly fine. There is a little flash in evidence but nothing to cause any concern. A nice touch is the provision of items for external stowage and separate appliqué armour panels.

This is a top quality, highly detailed smaller scale kit that would show up many of its larger scale brothers! The advances in injection moulding seem never ending and we the modellers are the undoubted beneficiaries. A superb kit that should be added to any 1:48 scale collection; for around £12 in the UK makes it outstanding value.

Available from www.creativemodels.co.uk

9/10 Paul Egerton



PLUS MODEL

1:35 HUTCH ITEM NO.218

Another interesting set from Plus Models for adding some interest to your latest diorama. This time more unusual than the toys I think is this set of rabbit hutches.

The set features a resin hutch with an etched brass fret for the doors. Included are three interesting looking rabbits and a cat designed to be perched on top of the hutch eyeing up potentially his next meal.

One of those sets that I just have to squeeze in to a diorama somewhere, like the set of rats Plus models also produce, great for adding that light-hearted touch.

8/10 The Editor



TRAKZ

1:35 SHERMAN LATE PRODUCTION HIGH BUSTLE TURRET ITEM NO.TXO115

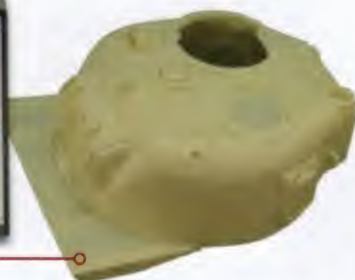
A straightforward direct replacement for any Sherman needing a later production 75mm armed turret, the main differences being the high rear bustle (obviously); earlier turrets featured a steep rear sloping top to the bustle where as this version the angle is much shallower. Secondly the right cheek armour has been thickened accordingly; another feature of later turrets that isn't always noticeable when studying wartime reference photos.

Trakz have also thoughtfully included a new commanders cupola and hatch, as well as an improved mantlet, which features a subtle cast texture and casting numbers.

One for the "Shermanaholics" who know their subject matter.

Available from www.lsamodels.co.uk

8.5/10 The Editor



Next Issue - On sale October 5th 2006

Russian Beauty

The Editor is busy finishing and experimenting with some different painting techniques on MiniArts lovely T70 light tank.



Fall Weiss

We finally bring you Fraser Gray's Italeri Sd.kfz 232 (6-rad), that we ran out of space for in this issue.



SEA Cent

Australian modeller Sam Dwyer builds a model close to his heart, the AFV Club Centurion Mk 5/1 as used during the Vietnam conflict.

FOR YOUR SAFETY



Don't forget, when using solvents such as glues, paints, thinners and cleaning agents, always ventilate your work area thoroughly and wear a face mask.

When using power tools, side cutters or any tool that can suddenly break or create high-speed airborne particles, wear approved eye protectors with hard, clear lenses. Please always model in safety!

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The Last Post...

NORMANDY 2006

The MMI summer holiday, a great laugh, great sights and great reference...

Earlier this summer, I had the pleasure of spending a week touring the Normandy beaches and the surrounding countryside for a week with a group of my friends. It has been my first visit, and now having been I wish I hadn't left it this long to finally getting around to visiting the place. I had always made excuses about the cost etc, but thanks to my good old mate Davy, the trip was an absolute bargain.

There is so much to see, that we really had to get our skates on to see as much as we did. For me, the highlights were the actual beaches (particularly Omaha), and the multitude of museums, some being much better than others. One of my favourites was the Pegasus Bridge museum, thanks in part to the fascinating accounts told by the museum guide, who turned out to be ex-RAF Regiment. The

cemeteries were a very sobering reminder of the cost - it doesn't matter which ones you visit, the common theme is how young these men and boys who lost their lives were.

Even though it wasn't in Normandy and it was a fairly long drive away, we also visited the French armour museum at Saumur - this place was everything I had hoped for and more. With over 200 armoured vehicles, this alone was an armour modellers dream. But as usual Murphy's Law intervened and decided to mess with my digital camera's memory card - for some stupid reason it refused to store anymore than 48 images, which isn't good when there are literally hundreds of things to photograph.

Lastly, I would like to thank the guys I went with for a great week of laughter, beer and great company.

Spud

The Churchill Mk VII outside the British Museum at Bayeux, looks very imposing from this low angle shot.



Some great modelling reference and some very sobering reminders.



PRODUCT OF THE MONTH

■ Abteilung 502 Modelling Oil Colour (Migs Oil Paints)

When this new range of paints arrived at the office, I really did think someone was having a laugh! At first I could not see the point of these, when there are already lots of superb oil paints on the market from many manufacturers. I did think it was a gimmick to re-label and market them toward Armour modellers.

But, I must remain unbiased and give them a try on the small scale Dragon Sherman in this issue - well, I have to admit they are really good. They thinned very well with both my own white spirits and Mig Productions own thinners.

In the past, when thinning oils I have noticed that they sometimes don't thin to a perfect wash, as little particles of pigment will appear on the mixing palette. This can ruin the wash on the model, but thankfully this was not the case with these Abteilung 502 oils.

I will certainly be using these from now on, and if you see them in my painting techniques photos from now on it's not just a cheap product placement trick, I really am using them. I just hope they aren't too expensive, as these should be in everyone's paint boxes.

Available from:

www.creativemodels.co.uk



1:35 '39-'45 SERIES

Sd.Kfz.171 PANTHER G

LATE PRODUCTION

Smart
Kit

Engineered for modeling enjoyment

Plastic parts with enhanced detail

Unprecedented value

Ready for instant assembly!



• Optional loops for attaching camouflage to turret

• Pre-painted camouflage top location marks for ultimate modeling convenience

• New on-vehicle tools

• Features sand lines and casting marks already built in - maximum turn-up for modeller

• Turret top plate authentically modelled

• Intricately slide-moulded turret travel lock with option of travel or combat configurations as separate parts



• Commander's cupola modelled in superb detail to function like real
• Multi-part commander's cupola with interior details and transparent periscopes



• Newly toolled turret with accurate vent patterns



• New hatch with interior hinge detail can be positioned open/closed



• Accurate toolled ring for turret



• Multi-part slide-moulded turret travel lock in great detail



• One-piece plastic gun barrel



• Cupola hatches with interior details can be positioned open/closed



• Gun assembly recessed in detail, complete with breech



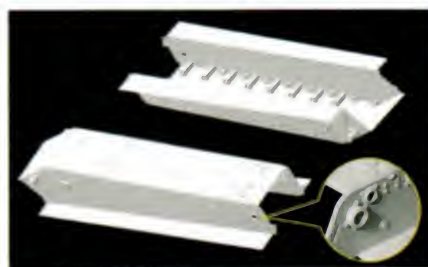
• Two types of slide-moulded mantlet



• Newly toolled cylindrical storage bin



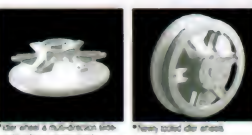
• New armored selector for rear deck air intake



• One-piece slide-moulded hull bottom with support detail



• Full suspension assembly with road wheels and idler arms that can be positioned on uneven terrain



• Idler wheel & multi-direction slide-moulded for maximum detail



• Newly toolled idler wheels



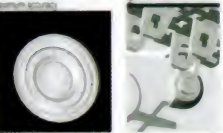
• Track links for sprocket section have guide horns as separate pieces for maximum accuracy



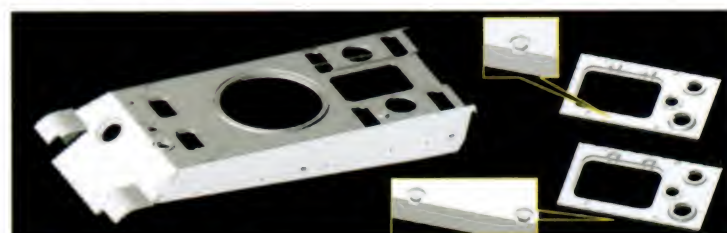
• Newly toolled M49C tracks with slide-moulded guide horn details



• Road wheels exhibit fine detail



• Includes steel wheel for M.A.N. assembly line version



• Newly toolled upper hull with separate engine decks



• Engine deck hatch with interior details can be modelled open/closed



• Driver's and radio operator's hatches with interior details and support arms



• Brand new 11-bladed fan exhausts



• Newly toolled jack



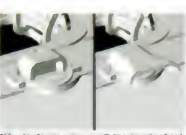
• Slide-moulded headlights assembly with maximum detail



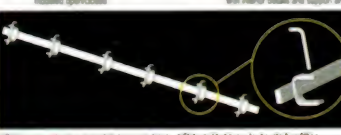
• Optional MG ball-mount plug



• Front ball-mount MG is reusable



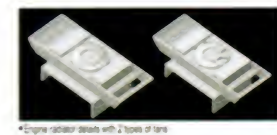
• Alternative driver's periscope with transparent part and optional cover



• Accurately spare track rack modelled in great detail



• Slide-moulded holes for handle-bar fitting



• Engine radiator details with 2 types of fans



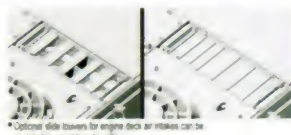
• Crew compartment heater with pin slots covers



• Newly toolled armored guard for cooling or outlet grids



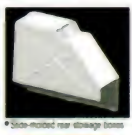
• Authentically recreated armored guards for cooling or intake grids



• Optional slide lowers for engine deck air intakes can be modelled in open/closed positions



• Two types of armored exhaust guards welded and cast



• Slide-moulded rear storage boxes



• Photo-etched parts for engine deck grids and cupola details

DRAGON

Dragon Kits are distributed in the UK by; The Hobby Company, Knowlhill, Milton Keynes, MK5 8PG
Dragon models are available from all good model shops

e-mail: info@dragon-models.com
6268 www.dragon-models.com